CLINICAL PROFILE, RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA

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Dedicated to

my parents,

teachers, and

friends

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Dr Gurpreet Singh

LIST OF ABBREVIATIONS

ACG	American College of Gastroenterology
ALP	Alkaline Phosphatase
AN	Anxiety Neurosis
Anti-TTG	Anti-Tissue Transglutaminase
BILIRUBIN(T)	Direct Bilirubin
BMI	Body Mass Index
CAD	Coronary Artery Disease
CAG	Canadian Association of Gastroenterology
CI	Confidence Interval
CKD	Chronic Kidney Disease
COPD	Chronic Obstructive Pulmonary Disease
COVID 2019	Coronavirus Disease 2019
EGD	Esophagogastroduodenoscopy
EPS	Epigastric Pain Syndrome
FD	Functional Dyspepsia
FGID	Functional Gastrointestinal Disorder
GERD	Gastroesophageal Reflux Disease
GI	Gastrointestinal
GSRS	Gastrointestinal Symptom Rating Scale
H.PYLORI	Helicobacter pylori
H2RA	H2-Receptor Antagonist
HB	Hemoglobin
HCV	Hepatitis C Virus
HPAA	Hypothalamic-Pituitary-Adrenal Axis
HRQOL	Health-Related Quality of Life

IBS	Irritable Bowel Syndrome
NDI	Nepean Dyspepsia Index
NSAID	Nonsteroidal Anti-Inflammatory Drug
OD	Organic Dyspepsia
OR	Odds Ratio
PPDS	Postprandial Distress Syndrome
PPI	Proton Pump Inhibitor
PUD	Peptic Ulcer Disease
P-Value	Probability Value
RA	Rheumatoid Arthritis
SD	Standard Deviation
SF 36 HS	Short Form 36 Health Survey
SF-NDI	Short Form Nepean Dyspepsia Index
SGOT	Serum Glutamic Oxaloacetic Transaminase (Aspartate Aminotransferase)
SGPT	Serum Glutamic Pyruvic Transaminase (Alanine Aminotransferase)
SPSS	Statistical Package for the Social Science
TCA	Tricyclic Antidepressants
TLC	Total Leukocyte Count
UD	Uninvestigated Dyspepsia
UGIE	Upper Gastrointestinal Endoscopy
USA	United States of America

ABSTRACT

Introduction: Dyspepsia refers to complex of upper abdominal symptoms consisting of epigastric pain/burning, abdominal fullness/bloating, upper abdomen discomfort, early satiety, nausea, vomiting etc. It is a common problem throughout the world and there are various factors which affect the epidemiology of dyspepsia. There can be organic causes of dyspepsia (organic dyspepsia, OD) which can be evaluated with history, examination and investigations. There are various alarm symptoms, which when present, warrant an upper gastrointestinal endoscopy. In absence of alarm symptoms and investigations failed to find the likely cause, the condition is called functional dyspepsia (FD). FD is divided into postprandial distress syndrome (PPDS) and epigastric pain syndrome (EPS). It can cause physical, mental, and social distress that can affect a patient's quality of life.

Aim of study: 1) To study the clinical profile & risk factors of subtypes of dyspepsia.

2)To study the quality of life of patients with dyspepsia and compare it with the control population.

Materials & Methods: This is a prospective observational study done on 100 patients, diagnosed with dyspepsia as per ROME IV criteria, and 100 controls who presented to Department of Medicine/Medical Gastroenterology of a tertiary care hospital of North India. It is based upon questionnaire to know the clinical profile and various risk factors of dyspepsia. Impact of Dyspepsia on quality of life of patients is assessed by using Short Form Nepean Dyspepsia Index.

Results: Of 100 dyspepsia cases, the mean age is 47.01 years and 41.38 years in FD and OD groups respectively with female to male ratio of 1.63 (62:38). The mean BMI is 24.01 kg/m^2 and 24.20 kg/m^2 for FD and OD groups respectively. Among FD individuals, 70% of them reside in urban areas, while 75% of those with OD reside in urban areas. Epigastric burning is the most common symptom among dyspepsia symptoms in both FD and OD patients. Spices, oily food, sedentary lifestyle, fast eating speed and gluten intolerance, were identified as significant factors in dyspepsia manifestation. Significant impacts on quality of life are reported in dyspeptics, with OD patients showing slightly higher disability scores (mean SFNDI=15.19) than FD patients (mean SFNDI=14.74). Tension and interference with daily activities are the domains of quality of life which are more affected in both FD and OD patients.

Conclusion: This study reveals that FD patients are slightly older than OD patients, with a female and urban predominance in both groups. Epigastric burning emerges as the predominant symptom, with dietary habits and lifestyle choices significantly influencing dyspepsia manifestation. Both FD and OD patients report notable impacts on quality of life, particularly in tension and daily activity interference.

Keywords: Dyspepsia, Organic Dyspepsia (OD), Functional Dyspepsia (FD), Epigastric Pain Syndrome (EPS), Post Prandial Distress Syndrome (PPDS), Short Form Nepean Dyspepsia Index (SFNDI)

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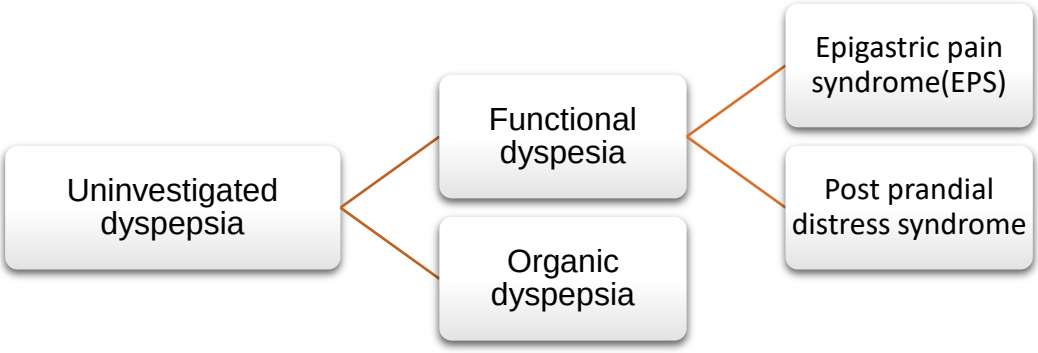
INTRODUCTION

Dyspepsia, originating from the Greek roots "δυς-" (dys-) and "πέψη" (pepse), meaning "difficult digestion," encompasses a diverse array of symptoms affecting the upper abdomen in contemporary medical parlance. Dyspepsia is a condition that is typically linked with pain or discomfort in the upper abdomen, but it can also present with a range of symptoms, such as epigastric pain, postprandial fullness, early satiation, anorexia, belching, nausea, vomiting, bloating in the upper abdomen, and rarely heartburn and regurgitation. Individuals suffering from dyspepsia often display several symptoms ranging from this range.

For dyspepsia, several consensus definitions have been put forth; the Rome Consensus Committees have contributed important classifications.[1] These definitions have evolved over time, focusing increasingly on symptoms thought to originate specifically from the gastroduodenal region rather than the esophagus. Earlier definitions broadly encompassed all sensations experienced in the upper abdominal and retrosternal areas, incorporating any symptoms related to the proximal digestive tract. The Rome I and II Consensus Committees defined dyspepsia as pain or discomfort localized to the upper abdomen, encompassing postprandial fullness, upper abdominal bloating, early satiation, epigastric burning, belching, nausea, and vomiting. They specified that if heartburn predominates, the diagnosis should lean towards gastroesophageal reflux disease (GERD) rather than dyspepsia.The Rome III Consensus Committee introduced a significant refinement by defining dyspepsia specifically as the presence of symptoms believed to arise from the gastroduodenal region.[2] This definition was reaffirmed by the Rome IV Consensus Committee.[3] The main symptoms associated with the gastroduodenal region at present include feeling full after eating, getting full quickly, and experiencing pain or burning in the upper abdomen. While other symptoms may coexist, they are not deemed central to the definition of dyspepsia.[4]

In individuals presenting with dyspepsia, further clinical evaluation may uncover an underlying organic condition responsible for the symptoms. These cases involve symptoms attributable to a discernible organic cause of dyspepsia. However, for the majority of individuals with dyspeptic symptoms, routine clinical assessments such as esophagogastroduodenoscopy (EGD) do not reveal organic abnormalities, leading to a diagnosis of functional dyspepsia (FD)."Uninvestigated dyspepsia (UD)" is the term used to describe dyspeptic symptoms in people who have not had diagnostic examinations and hence do not have a precise diagnosis to account for their symptoms.

Figure 1 DIVISIONS OF UNINVESTIGATED DYSPEPSIA.



According to ROME 4 criteria, **functional dyspepsia** is defined as presence of

1. *One or more* of the following:
    1. Bothersome epigastric pain
    2. Bothersome epigastric burning
    3. Bothersome early satiation
    4. Bothersome postprandial fullness

AND

2. Without any evidence of structural disease (even on upper gastrointestinal endoscopy) that can explain the symptoms.[5]

Postprandial Distress Syndrome (PDS) One or both of the following symptoms must be present at least three days a week in order to diagnose PDS:

1. an unpleasant sensation of fullness following a meal that significantly disrupts everyday activity.
2. Extreme early satiety that makes it unable to complete a normal meal.

Based on conventional examinations, such as upper gastrointestinal endoscopy, there must be no indication of organic, systemic, or metabolic illnesses that could account for these symptoms. The commencement of symptoms must have happened at least six months prior to the diagnosis, and these requirements must have been satisfied during the previous three months.[5]

Epigastric Pain Syndrome (EPS)

One or both of the following symptoms must be present at least one day each week in order to diagnose EPS:

1. Excruciating stomach pain that severely interferes with day-to-day activities.
2. Severe burning in the stomach that severely interferes with day-to-day activities.[5]

Based on conventional examinations, such as upper gastrointestinal endoscopy, there must be no indication of organic, systemic, or metabolic illnesses that could account for these symptoms. The commencement of symptoms must have happened at least six months prior to the diagnosis, and these requirements must have been satisfied during the previous three months.

Majority of the cases of dyspepsia are functional ones but other cases have underlying organic cause. There are various causes of organic dyspepsia which are as follows:

Figure 2 CAUSES OF ORGANIC DYSPEPSIA

GI LUMINAL TRACT

- Chronic gastric volvulus
- Chronic gastric or intestinal ischemia
- Food intolerance
- Gastric infections (CMV, fungus, tuberculosis, syphilis)
- Gastric or esophageal neoplasms
- Gastroesophageal reflux
- Gastroparesis (diabetes mellitus, post vagotomy, scleroderma,
- Chronic intestinal pseudo-obstruction, post viral,
- Idiopathic)
- Irritable Bowel Syndrome
- Infiltrative gastric disorders (Ménétrier disease, Crohn disease,
- Eosinophilic gastroenteritis, sarcoidosis, amyloidosis)
- Parasites (*Giardia lamblia, Strongyloides stercoralisrom*)
- Peptic ulcer disease

MEDICATIONS

- Acarbose
- Aspirin, other NSAIDs (including COX-2 selective agents)
- Colchicine
- Digitalis preparations
- Estrogens
- Ethanol
- Glucocorticoids
- Iron, potassium chloride
- Levodopa
- Narcotics
- Niacin, gemfibrozil
- Nitrates
- Orlistat
- Quinidine
- Sildenafil
- Theophylline

PANCREATICOBILIARY DISORDERS

- Biliary pain: cholelithiasis, choledocholithiasis, sphincter of Oddi dysfunction
- Chronic pancreatitis
- Pancreatic neoplasms

SYSTEMIC CONDITIONS

- Adrenal insufficiency
- Diabetes mellitus
- Heart failure
- Hyperparathyroidism
- Intra-abdominal malignancy
- Myocardial ischemia
- Pregnancy
- Renal insufficiency
- Thyroid disease

These causes can be evaluated by history, physical examination, investigations and upper gastro intestinal tract endoscopy (UGIE). If we find any findings on UGIE and in investigations, we label the case as organic dyspepsia. There are certain symptoms which when present warrant an UGIE. These are called alarm symptoms which are as follows:-

1. Age > 60,
2. Anemia,
3. GI bleed,
4. Progressive Dysphagia,
5. Persistent vomiting,
6. Unintentional weight loss,
7. Family history of GI malignancy/ palpable lump,
8. History of NSAID intake.[6]

There is a broad dyspepsia symptom complex in addition to the four cardinal symptoms of functional dyspepsia. This complex comprises of symptoms such asupper abdominal bloating, belching, lossof appetite, nausea, and vomiting. These symptoms are usually chronic in nature but can be intermittent in nature.

There is variation in the prevalence of dyspepsia symptoms in the general population according to different research. Numerous factors, including age, gender, occupation, geography, and whether or not one lives in an urban or rural area, affect this frequency. Moreover, a number of co-morbidities, such as diabetes mellitus, hypertension, and chronic renal disease, influence the incidence of dyspepsia. Risk factors for dyspepsia include medication use, eating patterns, substance use, and certain dietary habits.

Patients' social, mental, and physical well-being are all impacted by dyspepsia. The term "health-related quality of life" refers to a broad range of factors, including opinions about one's physical and mental well-being, including energy and emotional stability. Health hazards, functional capacities, economic circumstances, and the degree of social support that is available are also taken into account. Questionnaires, which can be general or customized for particular conditions, are commonly used to evaluate health-related quality of life. In order to determine the severity of symptoms and inform treatment choices, it is essential to assess how dyspepsia affects quality of life.The Nepean Dyspepsia Index (NDI), Short Form Nepean Dyspepsia Index (SF-NDI), and Gastrointestinal Symptom Rating Scale (GSRS) are a few specialized tools available for this purpose.

Concerns over the COVID-19 pandemic's effects on dyspepsia patients have been raised since the virus started to spread around the world. Functional dyspepsia and post-infection irritable bowel syndrome have been linked to acute infectious gastroenteritis.[7] There is concern that

COVID-19 may cause functional gastrointestinal disorders (FGIDs) after infection because SARS-CoV-2 affects the gastrointestinal tract.[8]

AIMS & OBJECTIVES

- To study the clinical profile & risk factors of subtypes of dyspepsia.
- To study the quality of life of patients with dyspepsia and compare it with the control population.

REVIEW OF LITERATURE

Dyspepsia is a common problem around the world. It refers to a symptoms complex which is believed to originate from the upper gastrointestinal tract. Uninvestigated dyspepsia (UD) can either be organic or functional dyspepsia. There can be underlying causes which explain the likely cause of these symptoms and is labeled as organic dyspepsia (OD). When no likely underlying cause is found and upper gastrointestinal tract endoscopy yields no abnormality, it is called functional dyspepsia (FD). There are various definitions and consensus statements for defining functional dyspepsia, but most widely accepted one is of Rome IV classification.

EPIDEMIOLOGY

Different population studies from different parts of world revealed wide range of prevalence of dyspepsia. There is also difference in prevalence of UD & FD. Different studies used different criteria to define dyspepsia and hence giving different results. When upper abdomen pain was used to define dyspepsia, prevalence of UD ranged from 7% to 34%.[9] When seen in North America, studies are present mainly from united states of America and Canada. In USA, different studies used different definitions and showed different prevalence. It ranges from 23 % to 31.9%.[10,11,12,13] In Canada single study from 12 different cities, using upper gastrointestinal tract symptoms showed prevalence rate of 28.6%.[14] Studies from UK showed prevalence of UD ranging from 38% to 41%.[15,16,17] In Europe, range of variation is wide starting from 14.5% to 27.5%.[18,19,20,21,22] The lowest rate is seen in Sweden (14.5%)[18], Denmark showed rate of 16.2% in males and 20.8% in females.[19,20] In Norway, single study showed UD prevalence rate of 27.5%.[21] Single study from one city of Spain, showed rate of 23.9%.[22] While studies from Australia showed prevalence rates from 32.5% to 38.2%using Rome 1 definition.[23,24] In New Zealand, community study showed rate of 34.2%.[25] In Africa, single community study from Nigeria used recurrent upper abdominal pain for the definition

and showed rate of UD as 45%.[26] In Asia, there is wide variation of UD rates in different studies from different places. In Taiwan, studies used Rome 1& 2 criteria which showed rate of 27.8%.[27] The studies from Hong Kong & Singapore showed rates of 18.4% and 7.9% respectively.[28,29] In Jordan, prevalence rate of 60.1% was noted.[30] In India, single epidemiological study from Mumbai showed prevalence rate of 30.4%.[31] In another multicentric study from India for on irritable bowel disease (IBS), another functional gastrointestinal disorder, found to have symptoms of dyspepsia which overlap with that of IBS symptoms and the rate was as high as 49%.[32] A study from Chandigarh, union territory of India, done for peptic ulcer disease showed 7.5% of the study population had symptoms of dyspepsia.[33] Hence wide variation in prevalence rate is present in different studies for dyspepsia in India.

The precise prevalence of genuine functional dyspepsia (FD), a condition diagnosed only after the exclusion of organic pathologies, has proven elusive in population-based research due to inherent logistical challenges. Notwithstanding these obstacles, a number of global epidemiological investigations have endeavored to quantify the incidence of functional dyspepsia, thereby illuminating the scope of this gastrointestinal syndrome. In a survey conducted among employees at a single institution in the United States, Shaib and El-Serag reported a functional dyspepsia (FD) prevalence rate of 29.2% among individuals with reflux symptoms and 15% among those without reflux symptoms.[34] In the United Kingdom, two distinct population surveys endeavored to ascertain the prevalence of FD. Jones et al. surveyed 9,936 subjects, among whom one-fifth had undergone either a barium meal examination or endoscopy, resulting in an extrapolated FD prevalence rate of 23.8%.[35] Subsequently, a community survey involving 2,066 adults revealed that 20% had undergone endoscopy, with an estimated FD prevalence of 11.5% in this population.[36] In Norway, a survey recorded an FD prevalence rate of 14.7% among 2,027 adults, the majority of whom consented to

endoscopy.[37] In Japan, Hirakawa et al. documented a 17% prevalence of FD in adults participating in a population gastric cancer screening program.[38] Lastly, in Taiwan, the prevalence of FD varied depending on the criteria applied. Among 2,018 adults who underwent endoscopy, FD was documented at 23.8% using Rome I criteria and at 11.8% using Rome II criteria.[39] In a study from Shanghai, China, of 782 patients older than 18 years with dyspeptic symptoms, 69% had FD and 31% had organic causes.[40] In another study from Hong Kong on 1,115 patients with uninvestigated functional gastrointestinal diseases (FGIDs, Rome II criteria) attending 14 medical clinics from 9 regions of Asia (China, Hong Kong, Indonesia, Korea, Malaysia,Singapore, Taiwan, Thailand and Vietnam), 43% had FD after investigations.[41] In a Korean study on patients referred to gastroenterologist of a tertiary hospital, 332 were diagnosed as FGIDs using Rome II criteria and 90 had organic causes on endoscopicexamination.[42] In a prospective study from Malaysia on 210 young patients with UD (age 30 ± 8 years), 62% were diagnosed as having FD by Leads dyspepsia questionnaires (8 item symptoms).[43] In a study from Singapore, of 5,066 dyspeptic patients (defined as pain and discomfort centered in the upper abdomen), organic causes for dyspepsia were found in 988 patients and the remaining 79.5% had FD.[44] In a study on 2,500 people visitingShimane Institute of Health Science, Shimane, Japan undergoing annual medical check-ups, 13% had FD by Rome II criteria.[45]

In India, Kumari P et al. conducted a study involving a total of 294 patients aged between 18 and 60 years, who underwent endoscopic evaluation. Among these, 34.7% (n=102) exhibited normal endoscopic results, indicative of functional dyspepsia (FD).[46] Goyal O et al conducted study among medical, nursing, and humanities students using Rome IV Diagnostic Questionnaire (for all FGIDs), Rome III questionnaire (for irritable bowel syndrome, functional diarrhea and functional constipation), and questionnaires assessing demography, physical activity, anxiety, and

depression. Most common FGIDs were functional dyspepsia (FD) (15.2%).[47] Bhatia V et al conducted a cross-sectional school-based survey conducted in 1115 children aged 10–17 years attending four semi urban government schools of National capital territory (NCT) of Delhi. It was found that the most frequent FGID noted was functional dyspepsia (2.7%).[48] There is scarcity of data on prevalence of UD and FD in Indian population. Available limited studies in India didn't use the currently accepted definition of functional dyspepsia i.e. Rome IV diagnostic criteria.

RISK FACTORS

Epidemiological studies investigating dyspepsia prevalence have predominantly focused on adult populations aged 18 years and above. While the majority of these investigations have not demonstrated a significant association between dyspepsia and specific age cohorts, several studies have identified notable trends in age-related prevalence patterns. A Canadian population-based survey reported peak prevalence of uninvestigated dyspepsia (UD) in the age group of 45 to 54 years.[49] Analogously, studies conducted in Asian populations revealed peak prevalence of functional dyspepsia (FD) among Chinese subjects aged 41-50 years [50] and Japanese adults aged 50-59 years. [51] The latter investigation further elucidated age-specific associations with dyspepsia subtypes: reflux-like symptoms were more prevalent in middle-aged adults, dysmotility-like symptoms were more frequently observed in individuals under 59 years, and ulcer-like symptoms predominated in adults under 39 years of age.

Conversely, epidemiological data from British [52], Taiwanese [53], and Danish [54] populations indicated an inverse relationship between UD prevalence and advancing age. Notably, a Danish survey reported a statistically significant lower prevalence of UD in adults over 70 years (10%) compared to those under 60 years (18.4%). In contrast, a survey conducted in urban Mumbai, India, demonstrated a higher prevalence of UD in adults over 40 years of age.[31] Despite these observed trends, it is

important to note that extreme age has not been consistently identified as a predictor of either UD or FD in the current literature. These findings underscore the complex and potentially population-specific nature of age-related dyspepsia prevalence patterns, warranting further investigation to elucidate the underlying mechanisms and potential confounding factors.

Relative to men, women are diagnosed more frequently with functional gastrointestinal (GI) disorders. With increased awareness of basic gender differences in perception and treatment of visceral pain, there has been new interest in research on gender disparity in the care of people with functional GI disorders. Past attention has focused on irritable bowel syndrome, whereas gender differences in other disorders are less well described.

Ahlawat SK et al. systematically review studies that have examined gender-related differences among patients with dyspepsia. MEDLINE, Health STAR, and PsycINFO databases were searched for English-language articles on dyspepsia published between 1966 and August 2001. Epidemiologic studies, clinical trials, review articles, and conceptual articles from peer-reviewed journals were included for review. Findings were summarized and discussed within a framework of biological and psychosocial factors. In most epidemiologic studies, no gender analysis was performed beyond a description of sample demographics, and when statistical significance was tested, few consistent gender differences were found.[55] Overall, it appears that men and women with dyspepsia possibly differ with respect to pattern of symptoms, pain perception or modulation, and antinociceptive mechanisms, but these observations have not been confirmed. No study evaluated the clinical implications of these possible differences.

A meta-analysis by Ford et al. for UD also showed a slightly higher prevalence in women than in men (25.3% vs 21.9%) with significant interstudy heterogeneity.[56] In terms of geographic area, North America

and some countries in Southern Europe, Northern Europe, Southeast Asia, and the Middle East showed more dyspepsia in women than men, but the same results were not seen in South America, Central America, Australasia, or Africa which was very similar to those of IBS.[57] However, recently Sperber et alconfirmed a predominance in women, even in those areas.[58] In addition, a recent population based large-scale study of patients with Rome IV criteria using online questionnaires in the United States (US), the United Kingdom, and Canada, women at all ages showed a significantly higher prevalence of FD than men, except for those older than 65 years.[59] A population-based cohort study from the National Registry of Iceland demonstrated that significantly more women than men reported FD at a 10-year follow up.[60] Using the Rome criteria in various nations, Lee K. et al. conducted a systematic review and meta-analysis of pertinent papers to look into national and worldwide trends in the prevalence of FD. Sex, continent, level of country, Rome criteria utilized for diagnosis, and study year were all sub grouped. The Rome criteria was separated into four categories: Rome I, II, III, and IV; this allowed for the analysis of the prevalence of FD in male and female categories. Women were substantially more prevalent than men in all categories, with Rome IV showing the most difference, with an odds ratio of 2.68 (95% CI 2.31–3.12) for women to men.[61]

Numerous epidemiological studies have elucidated that female gender, smoking, the use of non-steroidal anti-inflammatory drugs (NSAIDs), and Helicobacter pylori infection are correlated with dyspepsia within the community. However, the magnitude of these associations tends to be modest.FD and BMI may have an independent, inverse relationship. In young Japanese women, leanness may be a separate risk factor for FD.[62] Because the majority of population-based surveys have a very homogeneous ethnic mix, the relationship between ethnicity and FD has not been substantially investigated. One multi-ethnic study conducted in

Malaysia reported a significantly higher prevalence of FD among Indian and Malay participants compared to Chinese participants.[63]

Psychological comorbidity plays a significant role in the development of FD, particularly due to the communication between the gut and the brain via the enteric nervous system and the hypothalamic-pituitary-adrenal axis (HPAA). In a Swedish population-based survey, anxiety was found to increase the odds of developing FD nearly eight-fold over a ten-year period.[64] Acute gastroenteritis is also linked to the new onset of FD, termed post-infectious FD. A meta-analysis of 19 studies indicated an almost three-fold increase in the odds of developing FD in individuals more than six months post-infection.[65] Although post-infectious FD has been predominantly reported in developed countries, a study in Bangladesh confirmed its occurrence in tropical regions.[66]

Up to 80% of patients with FD report meal-induced symptoms, yet the role of food in the development of FD remains unclear.[67] High-fat foods may induce more symptoms, such as early satiety and bloating, compared to a high-carbohydrate diet. In Asia, heavy chili intake has been identified as a predictor of FD.[68] According to a Canadian survey, persons with poorer household incomes, lower levels of education, and those who were unemployed were more likely to experience chronic gastrointestinal symptoms (UD).[69]

Ford et al. conducted a comprehensive search of MEDLINE, EMBASE, and EMBASE Classic (up to January 2014) to identify population-based studies reporting the prevalence of uninvestigated dyspepsia in adults (≥15 years old). The prevalence was higher in women (OR 1.24; 95% CI 1.13 to 1.36), smokers (OR 1.25; 95% CI 1.12 to 1.40), NSAID users (OR 1.59; 95% CI 1.27 to 1.99), and H. pylori-positive individuals (OR 1.18; 95% CI 1.04 to 1.33).[56]

The Rome IV Diagnostic Questionnaire was employed by Goyal O et al. to evaluate all functional gastrointestinal disorders (FGIDs). Additionally, the Rome III questionnaire was utilized to evaluate IBS, Fdr, and FC, as well

as demographics, physical activity, anxiety, and depression. 1309 college students (425 in the medical field, 390 in nursing, and 494 in the humanities; mean age of 20.5 ± 2.1 years; 36.5% male) were among those involved in the study. Rome IV FGID prevalence was 26.9% (n = 352), substantially higher in females than in males (32.3% vs. 17.6%; $p < 0.001$), and significantly higher in medical (34.4%) and nursing (29.2%) students than in humanities (18.6%) ($p < 0.05$). This difference was also observed between genders. The most prevalent FGIDs were FC (2.1%), unidentified functional bowel disorder (2.1%), FDR (2.9%), IBS (6.2%), reflux hypersensitivity (3.5%), and FD (15.2%). FGID overlap was found in 9.3% of cases, with FD-IBS overlap accounting for the majority (4.4%). IBS had a greater prevalence (9.5%) according to Rome III criteria, although FC's (1.3%) and FDR's (0.92%) were lower. The results of multivariate analysis showed that the following factors independently predicted FGIDs: female gender, being a medical student, eating a non-vegetarian diet, consuming junk food, drinking tea or coffee, not getting enough exercise, anxiety, and sleeplessness.[47]

Shah SS et al. interviewed 2549 presumably healthy adults (mean age 37.2 [14.1] years; 1441 men), noting gastrointestinal symptoms, their investigation and treatment, dietary history, and addiction history. The frequency of dyspepsia was not related to diet type or spice consumption but was more prevalent among those who abused tobacco or alcohol.[31]

Solomon OA et al. conducted a matched case-controlled study to examine risk factors for uninvestigated dyspepsia. The study included 103 consecutive patients aged between 18 and 50 years presenting with dyspepsia (cases) matched by age and sex with an equal number of subjects without dyspepsia (controls). Data were collected using a structured questionnaire. Significant associations with dyspepsia included pepper intake ($p <0.0001$), tea intake ($p = 0.0002$), and higher education years ($p = 0.0065$). H. pylori seropositivity was not related to the risk of developing dyspepsia.[70]

Upper gastrointestinal malignancies, although an uncommon cause of dyspepsia, are a major concern for treating physicians. Traditionally, the possibility of malignancy is identified through patient history and physical examination. Alarm features in clinical evaluations include chronic gastrointestinal bleeding, progressive unintentional weight loss, progressive difficulty swallowing, persistent vomiting, iron deficiency anemia, or the presence of an epigastric mass. These alarm features, also known as alert features, red flags, or warning signs, are indicators associated with serious gastroenterological diseases such as underlying malignancy or significant pathologies like strictures or ulcers.

The updated guidelines from the American College of Gastroenterology (ACG) and the Canadian Association of Gastroenterology (CAG) advocate for the use of upper gastrointestinal endoscopy in individuals aged 60 years and above presenting with dyspepsia, aimed at excluding organic pathology.[71] This recommendation is conditional, allowing for personalized considerations such as earlier screening for patients at heightened risk of malignancy, such as those with a history of gastric cancer in high-risk regions during childhood or with a positive family history. For patients under 60 years old, initial management includes a non-invasive Helicobacter pylori test, followed by treatment if positive. If this approach proves ineffective, proton pump inhibitor (PPI) therapy is recommended, with tricyclic antidepressants (TCA) or prokinetic therapies considered as subsequent options. Patients undergoing endoscopy without identifiable pathology are categorized as having functional dyspepsia (FD). In cases where Helicobacter pylori infection is confirmed, eradication therapy is advised. In the absence of infection or treatment failure, a sequential regimen of PPI, TCA, and prokinetic therapy is suggested. Routine upper gastrointestinal motility testing is generally not recommended but may be beneficial in specific scenarios.[72]

The applicability of these recommendations within the Indian population has not been formally assessed. Kumari P et al. conducted a prospective

observational study to evaluate the utility of upper gastrointestinal endoscopy in investigating alarm features among dyspepsia patients under 60 years old, aiming to exclude upper gastrointestinal neoplasia. Their study involved consecutive patients aged 18 to 60 years presenting with at least one alarm symptom. Among the 294 patients evaluated, 34.7% (n=102) exhibited normal endoscopic findings, indicative of functional dyspepsia (FD), while 65.3% (n=192) showed abnormal findings, categorized as organic dyspepsia (OD). Of those with OD, 146 (49.6% of the total study population) had benign abnormalities, and 46 (15.6% of the total study population) were diagnosed with upper gastrointestinal malignancies. This research underscores the value of investigating alarm symptoms through upper gastrointestinal endoscopy in younger dyspepsia patients, revealing organic lesions, including malignancies, in a significant proportion (65.3%) of cases.[46]

QUALITY OF LIFE

Dyspepsia notably disrupts everyday activities and poses a considerable social and economic burden, impacting both healthcare costs and work productivity. The annual cost to society is estimated at around £1 billion. In a Malaysian population-based study, the financial burden of dyspepsia was assessed, revealing costs of 14,816 USD per 1,000 individuals in rural areas and 59,282 USD per 1,000 individuals in urban regions.[73] Evaluating health-related quality of life (HR QoL) involves using both disease-specific and generic instruments, with the Short Form 36 Health Survey (SF-36) being the most frequently employed generic tool in gastroenterology studies. Disease specific tools are crafted to identify HR QoL changes that generic instruments might miss but are important indicators of the disease. These specialized tools are often more sensitive than their generic counterparts. Nevertheless, an excessively sensitive disease-specific instrument could identify clinically insignificant changes in placebo groups. Additionally, because of their narrow focus, these instruments may not detect unexpected major changes in HR QoL and are

not suitable for use across different diseases. Specific questionnaires commonly employed in Asian studies of functional gastrointestinal disorders include the Irritable Bowel Syndrome Quality of Life instrument and the Nepean Dyspepsia Index (NDI).

The Nepean Dyspepsia Index (NDI), devised by a research group in Sydney, Australia, initially comprised 42 questions designed to assess quality of life across 17 key domains. Additionally, it included a list evaluating the frequency, intensity, and disruption caused by 15 upper gastrointestinal symptoms over the preceding two weeks, employing a five-level Likert scale for assessment. Subsequently, the NDI was refined to 25 questions distributed across five subscales: general tension/sleep (nine items), daily activity interference (six items), effects on eating/drinking (three items), knowledge/control of dyspepsia (four items), and impacts on work/study (three items). Further streamlining led to a 10-question format, with each subscale represented by two questions. The NDI effectively measures symptoms and HR QoL in patients with functional dyspepsia, exhibiting high responsiveness, robust internal consistency (with a coefficient exceeding 0.7 for all scales), and a strong, significant correlation with the original comprehensive questionnaire. [74] A short-form version of the NDI has been translated into Hindi and validated for use in India.[75]

In a cross-sectional investigation led by Egbo O et al., involving 324 individuals suffering from dyspepsia, the study aimed to evaluate the quality of life among these patients. The findings revealed that 300 participants (92.6%) exhibited significantly diminished health-related quality of life (HR QoL), as indicated by an SF NDI mean score of 31.3 ± 9.1. Among the various subdomains, interference with daily activities and eating and drinking were notably more impaired compared to other HR QoL subdomains ($p < 0.001$). The study found no significant difference in HR QoL impairment between patients with functional dyspepsia and those with organic dyspepsia ($p = 0.694$). Within the organic dyspepsia cohort,

patients diagnosed with upper gastrointestinal cancers had markedly worse HR QoL SF NDI mean (SD) scores (39.7 ± 5.9) in comparison to those with gastritis, peptic ulcer disease, and GERD (30.3 ± 9.2, 31.5 ± 9.7, and 32.9 ± 7.1, respectively) ($p = 0.01$).[76]

Similarly, Shetty AJ et al. utilized the EQ-5D questionnaire to assess the impact of dyspepsia on patients' quality of life in a study comprising 900 participants, observed between November 2013 and December 2014. Of these, 390 (43.30%) were diagnosed with organic dyspepsia, 311 (34.60%) with functional dyspepsia, and 199 (22.10%) with endoscopy-negative recent dyspepsia. The overall health status was comparably affected across all three subgroups. Commonly observed HR QoL impairments were in the areas of pain (98.4%), usual activities (66.20%), and anxiety/depression (70.60%), with less frequent impairments noted in mobility (22.70%) and self-care (10.9%). No significant differences were found in HR QoL impairment among the three subgroups concerning mobility and usual activities. Organic dyspepsia more commonly impacted self-care, anxiety/depression was more prevalent in functional dyspepsia, and pain, despite its significant variance among subgroups, was a common issue across all three categories.[77] Further research is essential to leverage this knowledge in enhancing the management strategies for the distinct etiological subgroups of dyspepsia.

Functional gastrointestinal disorders encompass a spectrum of stress-sensitive gut-brain interactions. The COVID-19 pandemic has induced significant stress and anxiety among the general populace. Measures enforced to combat the spread of the virus, such as physical distancing, have exacerbated both physical and mental health challenges. In a meta-analysis conducted by Marasco G et al., data from MEDLINE, Scopus, and Embase were systematically reviewed up to December 17, 2022, to determine the incidence of post-COVID-19 functional dyspepsia (FD) and irritable bowel syndrome (IBS). Ten studies met the inclusion criteria for this analysis. Four studies, comprising a total of 1,199 COVID-19 patients,

were included to assess FD, while ten studies, encompassing 2,763 COVID-19 patients, were evaluated for IBS. Post-COVID-19 IBS was reported in 195 patients (12%, 95% CI: 8%-16%, I^2 95.6%, and Egger's p = 0.002). The pooled odds ratio (OR) for IBS development in COVID-19 patients compared to controls was 6.27 (95% CI: 0.88-44.76, p = 0.067, I^2 = 81.4%). When considering only prospective cohort studies (three studies), the pooled OR was 12.92 (95% CI: 3.58-46.60, p < 0.001, I^2 = 0%). These findings indicate that COVID-19 survivors are at an elevated risk for developing IBS compared to controls.[78] No definitive data are currently available for FD.

COVID 19 RELATION

Oshima T et al. conducted an online survey in Japan from May 26 to 27, 2020, targeting a randomly selected panel of participants. Respondents completed a questionnaire addressing stress, physical distancing, and concerns related to COVID-19. Gastrointestinal symptoms were evaluated to diagnose functional dyspepsia (FD) and irritable bowel syndrome (IBS) according to Rome III criteria, while psychological symptoms were assessed using the Hospital Anxiety and Depression Scale. A total of 5,157 subjects participated, revealing a prevalence of 8.5% for FD, 16.6% for IBS, and 4.0% for FD-IBS overlap. Respondents with FD-IBS overlap reported the most severe gastrointestinal and psychological symptoms, followed by those with IBS alone, and then FD alone. During the COVID-19 pandemic, 11.9% of respondents reported a worsening of gastrointestinal symptoms, whereas 2.8% noted an improvement. The study identified that FD-IBS overlap, comorbid psychological conditions, and stress at work or school were significantly associated with symptom deterioration. Conversely, younger age, commuting by public transport, and working or studying from home were linked to symptom improvement. The pandemic adversely affected individuals with FD and IBS, with those experiencing FD-IBS overlap syndrome being particularly vulnerable to exacerbation of gastrointestinal symptoms.[79]

In the post-COVID era, it is imperative for physicians to provide heightened care to patients suffering from Functional disorders and FD, considering the profound impact of the covid 19 outbreak on these conditions.

MATERIALS AND METHODS

This is a prospective observational study done on 100 patients diagnosed with dyspepsia as per ROME IV criteria and 100 controls who presented to Department of Medicine/Medical Gastroenterology of a tertiary care hospital situated at Ludhiana, in Punjab state of North India. It is based upon questionnaire to know the clinical profile and various risk factors of dyspepsia. Impact of Dyspepsia on quality of life of patients is assessed by using Short Form Nepean Dyspepsia Index in English language and Hindi version of SFNDI.

SOURCE OF DATA

The study was done on patients diagnosed with dyspepsia and controls (healthy relatives of the patients) presented in medicine and allied specialties at Dayanand medical college and hospital, Ludhiana within a period from September 2022 to march 2024. Sample size was 100 patients and 100 controls.

METHODS OF COLLECTION

Cases were selected on the basis of inclusion and exclusion criteria as follows-

Inclusion criteria

1) Patient diagnosed with dyspepsia as per clinical features.
2) Patient's age > 18 years and < 75 years.

Exclusion criteria

1) Patients not satisfying inclusion criteria.
2) Patients not willing to take part in the study.
3) Patients with language barrier.

STUDY DURATION

From 15th September 2022 to 31st March 2024

OUTCOME

Assessment of quality of life of patients as compared to healthy relatives of patients. Clinical profile parameters and risk factors associated with dyspepsia.

STATISTICAL ANALYSIS

Data was described in terms of range; mean ± standard deviation (± SD), frequencies (number of cases) and relative frequencies (percentages) as appropriate. Comparison of quantitative variables was done using Student t-test and Man Whitney U test for independent samples for parametric and non-parametric data respectively. For comparing categorical data, Chi square (x2) test was performed and fisher exact test was used when frequency was less than 5. A probability value (p value) less than 0.05 was considered statistically significant. All statistical calculations were done using SPSS (Statistical Package for the Social Science) 21 version (SPSS Inc., Chicago, IL, USA) statistical program for Microsoft windows.

OBSERVATION AND RESULTS

This is a prospective observational study done on 100 patients diagnosed with dyspepsia as per ROME IV criteria and 100 controls who presented to Department of Medicine/Medical Gastroenterology of a tertiary care hospital situated at Ludhiana, in Punjab state of North India. It is based upon questionnaire to know the clinical profile and various risk factors of dyspepsia. Impact of Dyspepsia on quality of life of patients is assessed by using Short Form Nepean Dyspepsia Index in English language and Hindi version of SFNDI.

Table 1 DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO AGE

		FD		OD		CONTROL		Total	Chi-square value	p-value
		No.	%age	No.	%age	No.	%age			
AGE GROUP	< 30	13	15%	4	25%	17	17%	34	8.480	0.388
	31-40	19	23%	5	31%	19	19%	43		
	41-50	15	18%	4	25%	16	16%	35		
	51-60	17	20%	1	6%	13	13%	31		
	> 60	20	24%	2	13%	35	35%	57		
Total		84	100%	16	100%	100	100%	200		

In our study, highest number of the functional dyspepsia patients (n=20, 24%) were in the age group of more than 60 years. In contrast, among organic dyspepsia patients, 31-40 years age group had the highest number of patients (n=5, 31).This distribution suggests age-related patterns in the prevalence of dyspepsia types, with organic dyspepsia being more common in younger individuals and functional dyspepsia maintaining a steady presence across all age groups.

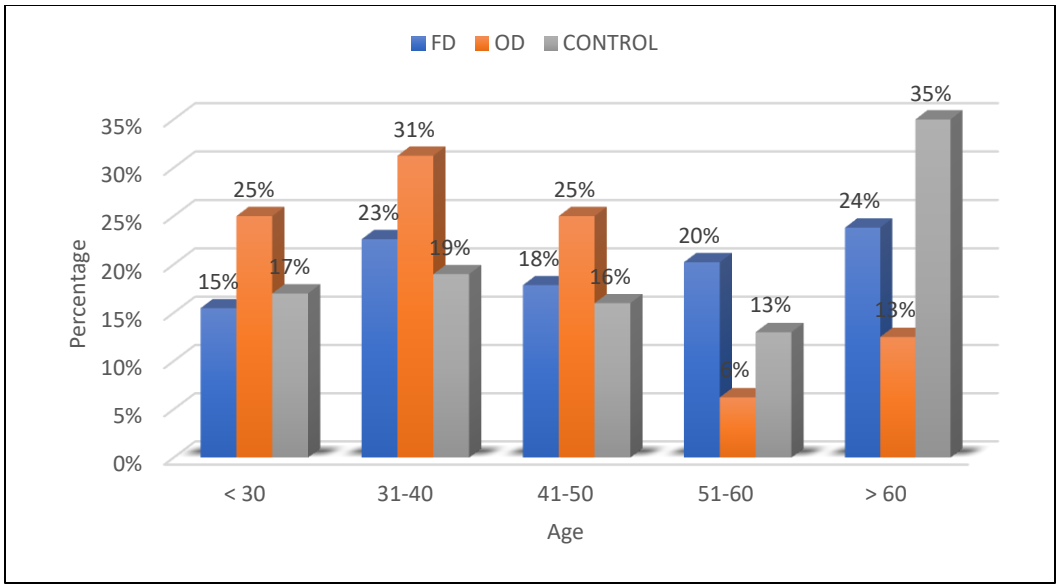


Figure 3 DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO AGE

Table 2 COMPARISON BETWEEN DIFFERENT TYPES OF DYSPEPSIA ACCORDING TO MEAN AGE

		N	Mean	SD	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	F	p-value
						Lower Bound	Upper Bound				
AGE	FD	84	47.01	14.72	1.61	43.82	50.21	18.00	74.00	2.468	0.087
	OD	16	41.38	14.52	3.63	33.64	49.11	24.00	74.00		
	CONTROL	100	50.19	17.15	1.72	46.79	53.59	20.00	80.00		

In our study, for the FD groupconsisting of 84 participants, the mean age is 47.01 years with a standard deviation of 14.72 years. The standard error of the mean is 1.61, and the 95% confidence interval for the mean ranges from 43.82 to 50.21 years. The OD group, with 16 participants, has a mean age of 41.38 years and a standard deviation of 14.52 years. The standard error is 3.63, with the 95% confidence interval for the mean ranging from 33.64 to 49.11 years. The mean age for the FD group is mid-forties (47.01 years), slightly younger for the OD group (41.38) in the early forties, and around fifty for the control group. Despite the observed differences in mean ages, the ANOVA test (F value=2.468, p value=0.087) indicates that these differences are not statistically significant at the 0.05 level.

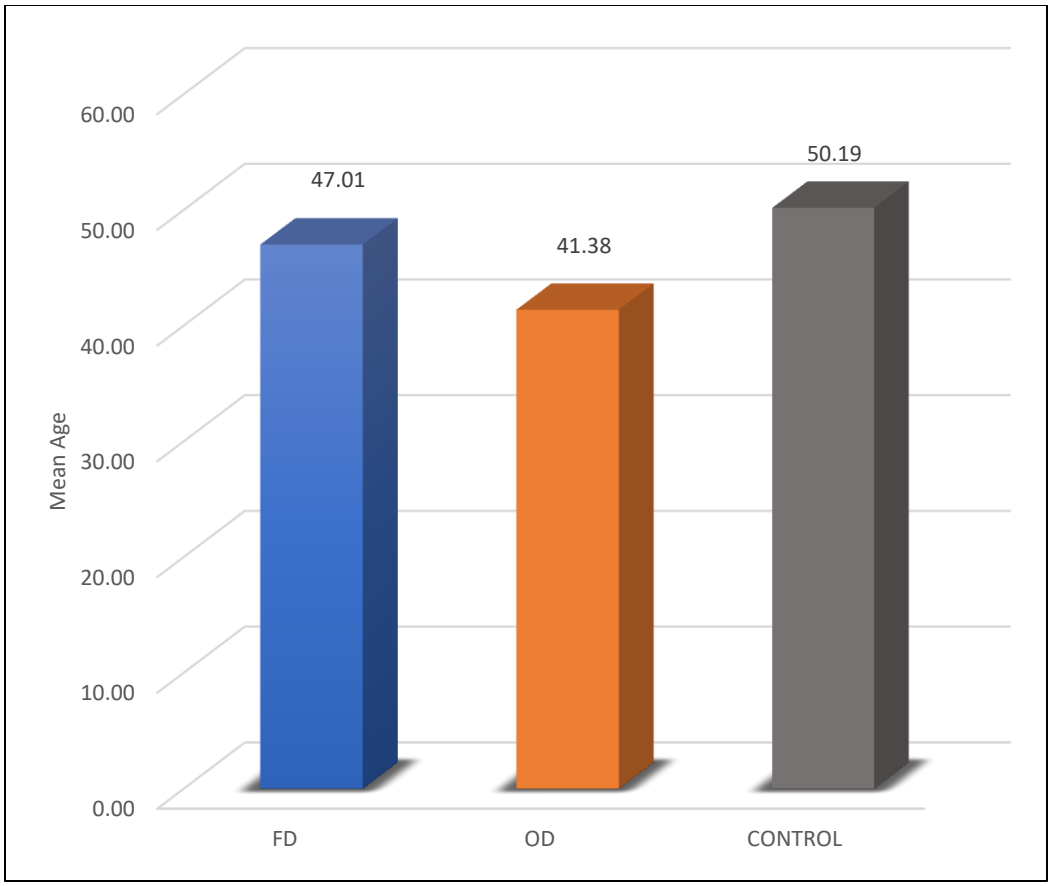


Figure 4 COMPARISON BETWEEN DIFFERENT TYPES OF DYSPEPSIA ACCORDING TO MEAN AGE

Table 3 DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO GENDER

		FD		OD		CONTROL		Total	Chi-square value	p-value
		N	%	N	%	N	%			
GENDER	F	51	61%	11	69%	51	51%	113	2.815	0.245
	M	33	39%	5	31%	49	49%	87		
Total		84	100%	16	100%	100	100%	200		

In the FD group, there are 51 females, representing 61% of the group, and 33 males, making up 39% of the group. For the OD group, there are 11 females, accounting for 69%, and 5 males, representing 31%. In the control group, there are 51 females (51%) and 49 males (49%). In summary, females are more prevalent in both the FD and OD groups compared to the control group, which has a nearly equal gender distribution. However, the Chi-square test suggests that these differences in gender distribution among the groups are not statistically significant.

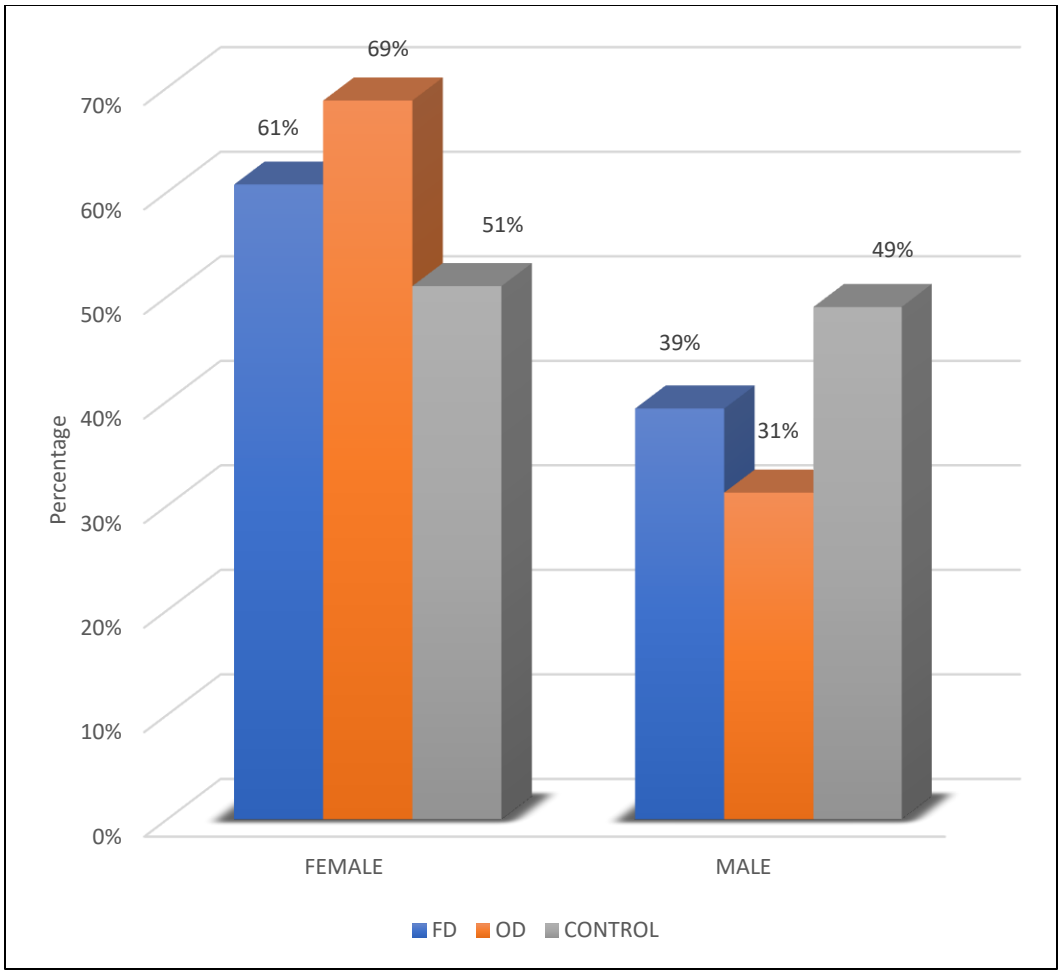


Figure 5 DISTRIBUTION OF STUDY PARTICIPANTS ACCORDING TO GENDER

Table 4 DISTRIBUTION OF PATIENTS ACCORDING TO BMI

		DYSPEPSIA TYPE				Total
		FD		OD		
BMI group	< 18.5	8	10%	0	0%	8
	18.5-24.9	44	52%	11	69%	55
	25-29.9	25	30%	5	31%	30
	30-34.9	6	7%	0	0%	6
	35-39.9	1	1%	0	0%	1
Total		84	100%	16	100%	100

In summary, the BMI group 18.5-24.9 has the highest representation in both FD (52%) and OD (69%). The BMI groups 25-29.9 and < 18.5 also show notable proportions in the FD group (30% and 10%, respectively), while the OD group has no representation in the lower and higher BMI categories (< 18.5, 30-34.9, and 35-39.9). This distribution suggests that individuals with dyspepsia, particularly those with OD, are more likely to fall within the normal BMI range (18.5-24.9), while those with FD show a broader distribution across various BMI categories.

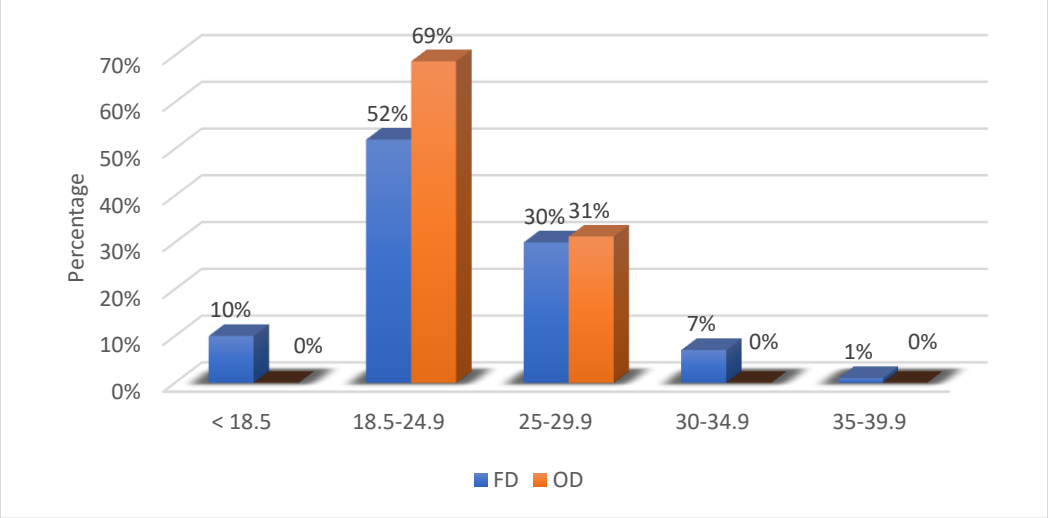


Figure 6 DISTRIBUTION OF PATIENTS ACCORDING TO BMI

Table 5 COMAPRISON OF MEAN BMI IN DIFFERENT TYPES OF DYSPEPTICS

TYPE	N	Mean BMI	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
FD	84	24.01	4.28	0.47	23.09	24.94	16.46	35.64
OD	16	24.20	2.46	0.61	22.89	25.51	19.71	29.07

In summary, the mean BMI for the FD group is 24.01, with a wider spread of values (standard deviation of 4.28) compared to the OD group, which has a mean BMI of 24.20 and a smaller spread of values (standard deviation of 2.46). Both groups have similar mean BMIs, with overlapping confidence intervals, indicating no significant difference in mean BMI between the two groups. The BMI range for individuals with FD is broader, suggesting greater variability in this group compared to those with OD.

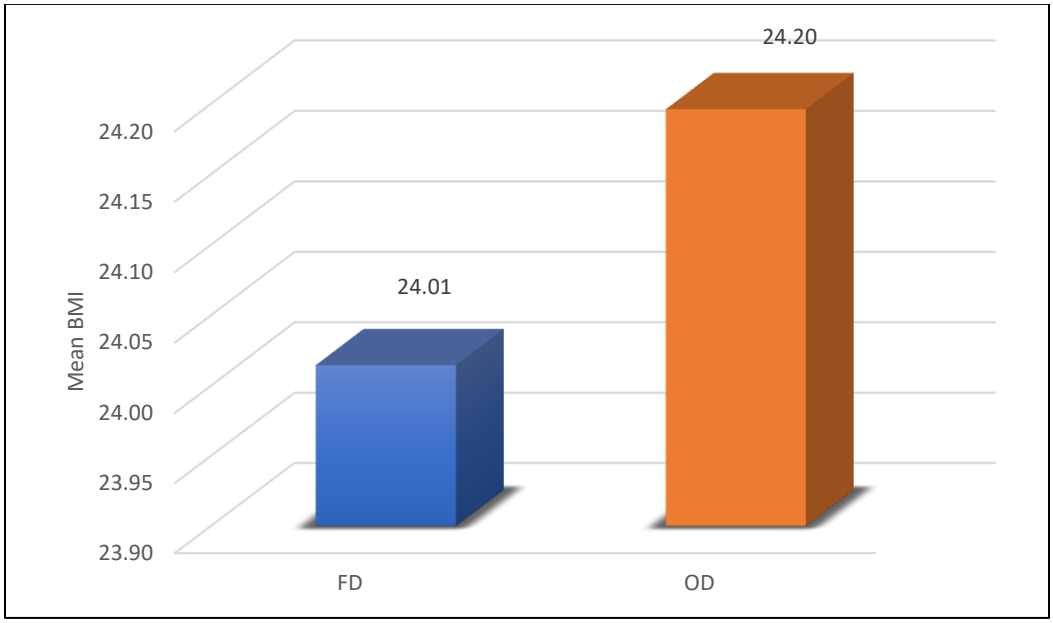


Figure 7- COMAPRISON OF MEAN BMI IN DIFFERENT TYPES OF DYSPEPTICS

Table 6 DISTRIBUTION OF PATIENTS ACCORDING TO RESIDENCY

		DYSPEPSIA TYPE				Total	GENDER	
		FD		OD			F	M
AREA	RURAL	25	30%	4	25%	29	16	13
	URBAN	59	70%	12	75%	71	46	25
Total		84	100%	16	100%	100	62	38

Among individuals with Functional Dyspepsia (FD), 70% reside in urban areas and 30% in rural areas, while 75% of those with Organic Dyspepsia (OD) live in urban areas and 25% in rural areas. Gender distribution shows a higher prevalence among females, who make up 62% of the dyspepsia population, compared to 38% males. In rural areas, females constitute 55% (N=16) and males 45% (N=13), whereas in urban areas, 65% (N=46) are females and 35% (N=25) are males. Overall, the data suggests that urban living is associated with higher dyspepsia rates, particularly among females, who are more frequently affected by both FD and OD across different areas.

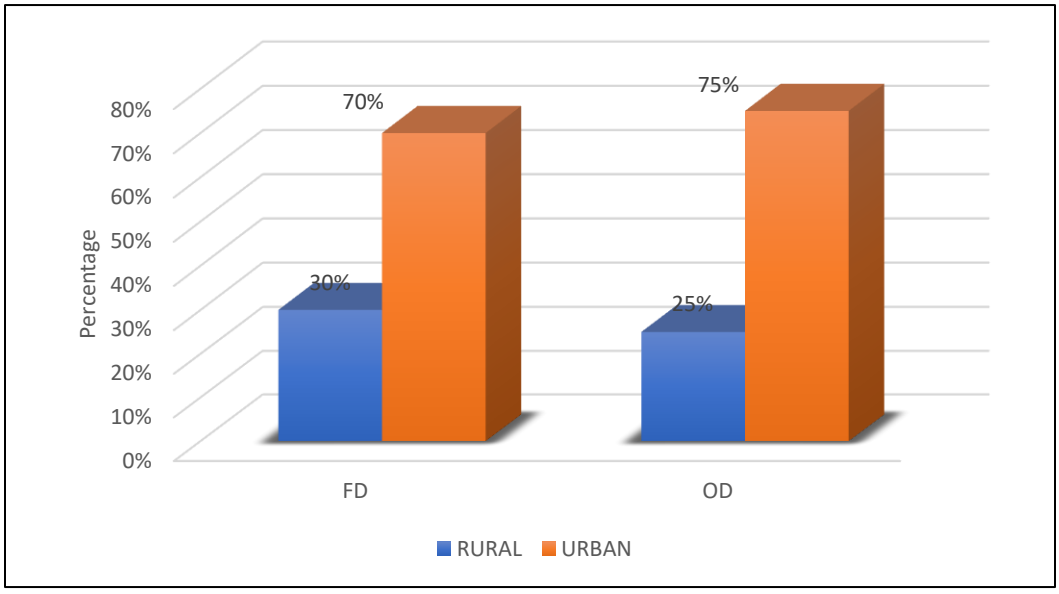


Figure 8 DISTRIBUTION OF PATIENTS ACCORDING TO RESIDENCY

Table 7 DISTRIBUTION OF PATIENTS ACCORDING TO EDUCATION LEVEL

		DYSPEPSIA TYPE				GENDER		TOTAL
		FD	FD	OD	OD	F	M	
EDUCATION LEVEL	POST GRADUATE	1	1%	0	0%	1	0	1
	GRADUATE	20	24%	8	50%	14	14	28
	HIGH SECONDARY	17	20%	1	6%	11	7	18
	SECONDARY	22	26%	5	31%	16	11	27
	PRIMARY	24	29%	2	13%	20	6	26
Total		84	100%	16	100%	62	38	100

Among the 100 individuals with dyspepsia, 62 are female and 38 are male. FD is notably more prevalent among those with lower education levels, with the highest representation seen in individuals with primary education (29%) and secondary education (26%). Conversely, OD is more frequently observed in individuals with higher education, particularly among graduates (50%). The data also indicates that females are more commonly affected by FD across all education levels, while males are more represented in OD cases, especially at the graduate level.

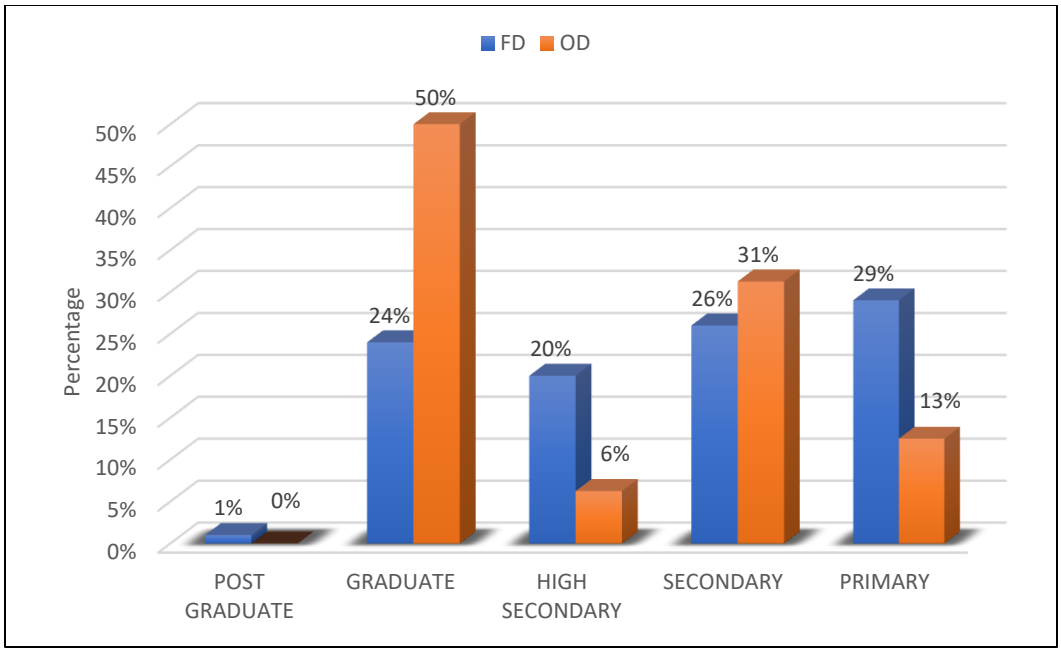


Figure 9 DISTRIBUTION OF PATIENTS ACCORDING TO EDUCATION LEVEL

Table 8 DISTRIBUTION OF PATIENTS ACCORDING TO OCCUPATION

		DYSPEPSIA TYPE				Total
		FD		OD		
OCCUPATION	BUSINESS	13	15%	2	13%	15
	FARMER	9	11%	0	0%	9
	GOVT JOB	2	2%	1	6%	3
	GOVT JOB RETIRED	2	2%	0	0%	2
	HOUSEWIFE	37	44%	6	38%	43
	LABOUR	1	1%	0	0%	1
	PVT JOB	14	17%	6	38%	20
	STUDENT	6	7%	1	6%	7
Total		84	100%	16	100%	100

In our study, housewives represent the largest group with FD (44%) and also have a notable presence with OD (38%). Overall, FD is most common among housewives, while OD is notably higher among those in private jobs and housewives. This suggests that occupation may influence the type of dyspepsia, with certain occupations, particularly those involving less physical activity or higher stress.

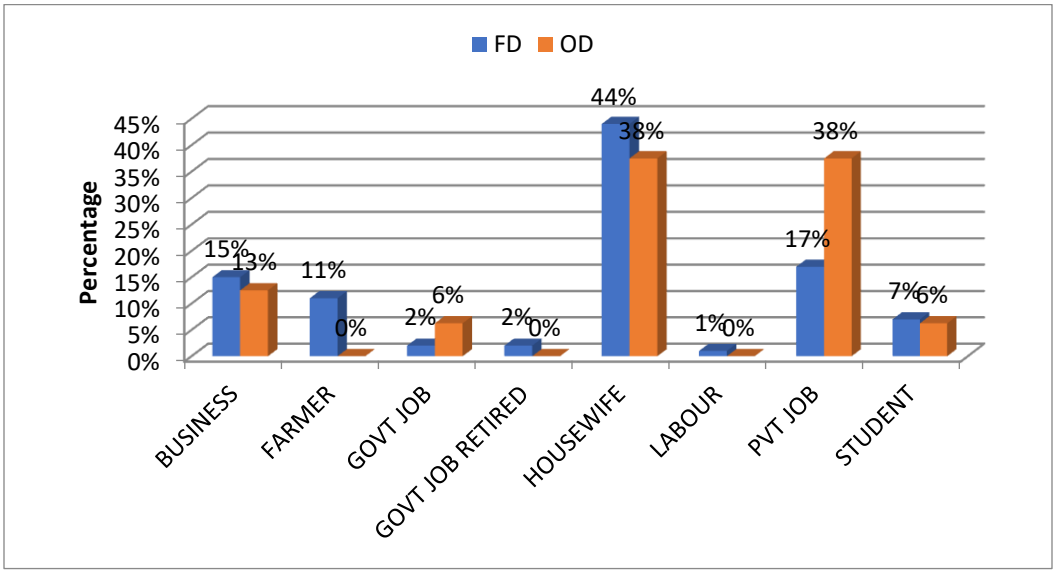


Figure 10 DISTRIBUTION OF PATIENTS ACCORDING TO OCCUPATION

Table 9 FREQUENCY OF ALARM SYMPTOMS IN DYSPEPTICS PATIENTS

		DYSPEPSIA TYPE				Total
		FD		OD		
ALARM SYMPTOMS_AGE > 60	N	63	75%	14	88%	77
	Y	21	25%	2	13%	23
ANEMIA	N	83	99%	16	100%	99
	Y	1	1%	0	0%	1
GI BLEED	N	84	100%	13	96%	97
	Y	0	0%	3	4%	3
PROGESSIVE DYSPHAGIA	N	83	99%	16	100%	99
	Y	1	1%	0	0%	1
PERSISTENT VOMITING	Y	0	0%	0	0%	0
	N	84	100%	16	100%	100
UNINTENTIONAL WEIGHT LOSS	N	84	100%	15	94%	99
	Y	0	0%	1	6%	1
FAMILY HISTORY OF MALIGNANCY/PALPABLE LUMP	N	84	100%	16	100%	100
	Y	0	0	0	0	0
HISTORY OF NSAID INTAKE	N	71	85%	16	100%	87
	Y	13	15%	0	0%	13

The most frequently observed symptom is age > 60 year was reported in 23 cases, highlighting the significance of advanced age as an alarm symptom. Following this, history of NSAID intake is the second most common alarm symptom, present in 13 cases. This suggests a considerable association between NSAID use and the occurrence of alarming symptoms.Other symptoms such as GI bleed are noted in 3 cases, indicating gastrointestinal bleeding as a relatively less frequent but critical symptom. Unintentional weight loss,progressive dysphagiaand anemiaare each reported in 1 case, reflecting their occurrence but with lower frequency in the studied group.Interestingly,family history of malignancy/palpable lump andpersistent vomiting are not reported in any cases, which might suggest these are less common alarm symptoms in this particular cohort.

The distribution of these symptoms underlines the prominence of older age and NSAID intake as significant alarm symptoms and underscores the need for vigilance in managing these patient groups.

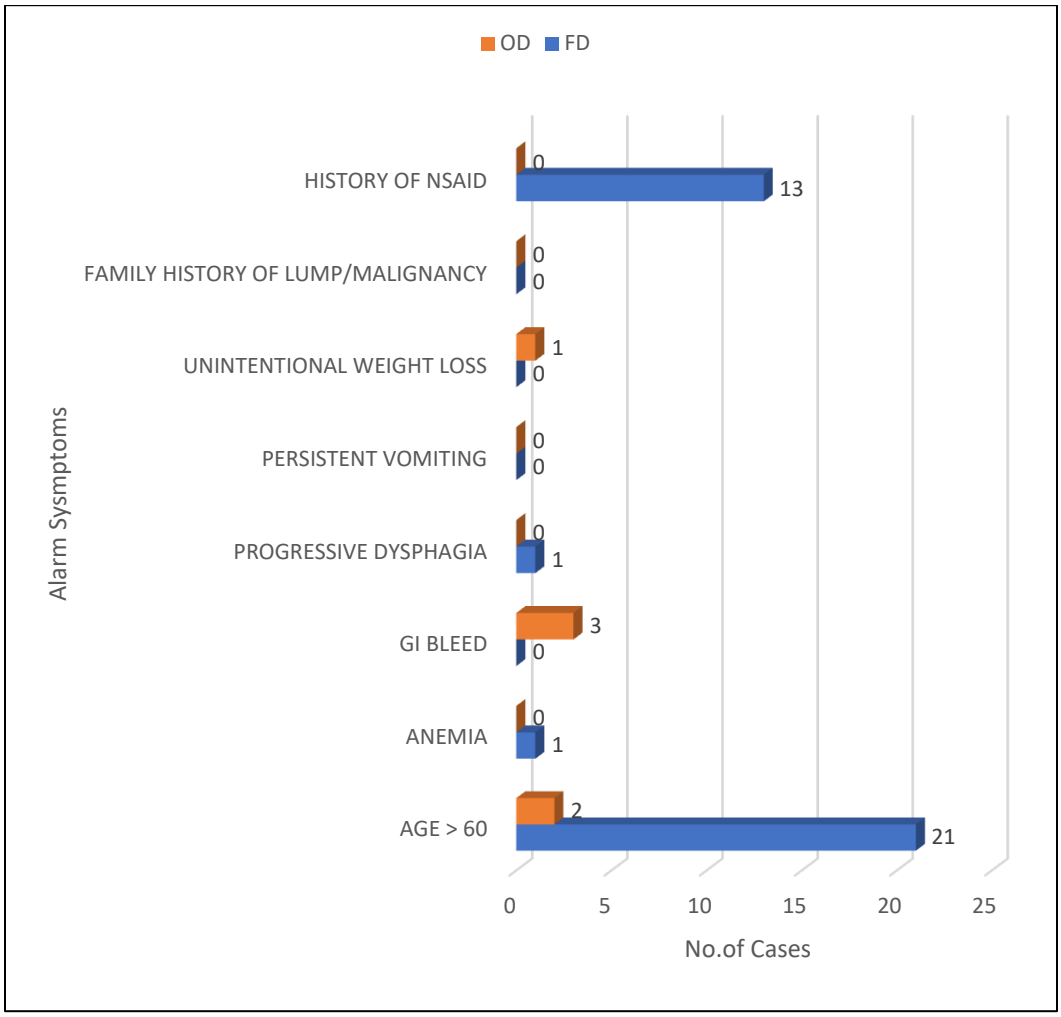


Figure 11 FREQUENCY OF ALARM SYMPTOMS IN DYSPEPTICS PATIENTS

Table 10A DYSPESIA SYMTOPMS COMPLEX AMONG FUNCTIONAL DYSPEPSIA PATIENTS

SYMPTOMS COMPLEX	Present	Absent	Minimal to Mild	Moderate to Severe
EPIGASTRIC BURNING	48	36	43	5
EPIGASTRIC PAIN/ACHE	40	44	33	7
BURPING/BELCHING	37	47	25	12
BLOATING/PRESSURE IN UPPER ABDOMEN	35	49	23	12
UPPER ABDOMEN DISCOMFORT	21	63	17	4
EARLY SATIETY	17	67	17	0
NAUSEA	11	73	10	1
POST PRANDIAL FULLENESS	8	76	8	0
BURNING SENSATION IN CHEST	8	76	8	0
BITTER/SOUR TASTING FLUID IN THROAT/MOUTH	8	76	6	2
BAD BREATH	5	79	5	0
VOMITING	2	82	2	0
PAIN/ACHE IN CHEST	1	83	1	0
UPPER ABDOMEN CRAMPS	0	84	0	0

Epigastric burning is the most common symptom, present in 48 cases, followed closely by epigastric pain/ache in 40 cases. Burping/belching (37 cases) and bloating/pressure in the upper abdomen (35 cases) are also frequently reported. Upper abdomen discomfort (21 cases) and early satiety (17 cases) are less common but still significant. Most symptoms, when present, tend to be minimal to mild in severity. Epigastric burning and pain/ache show the highest numbers of moderate to severe cases (5 and 7 respectively), while burping/belching and bloating both have 12moderateto severe cases each. Notably, many symptoms are absent in the majority of cases, with upper abdomen cramps being completely absent, and pain/ache in chest and vomiting occurring very rarely (1 and 2 cases respectively). This data suggests that while epigastric discomfort is common in functional dyspepsia, severe manifestations of symptoms are relatively infrequent.

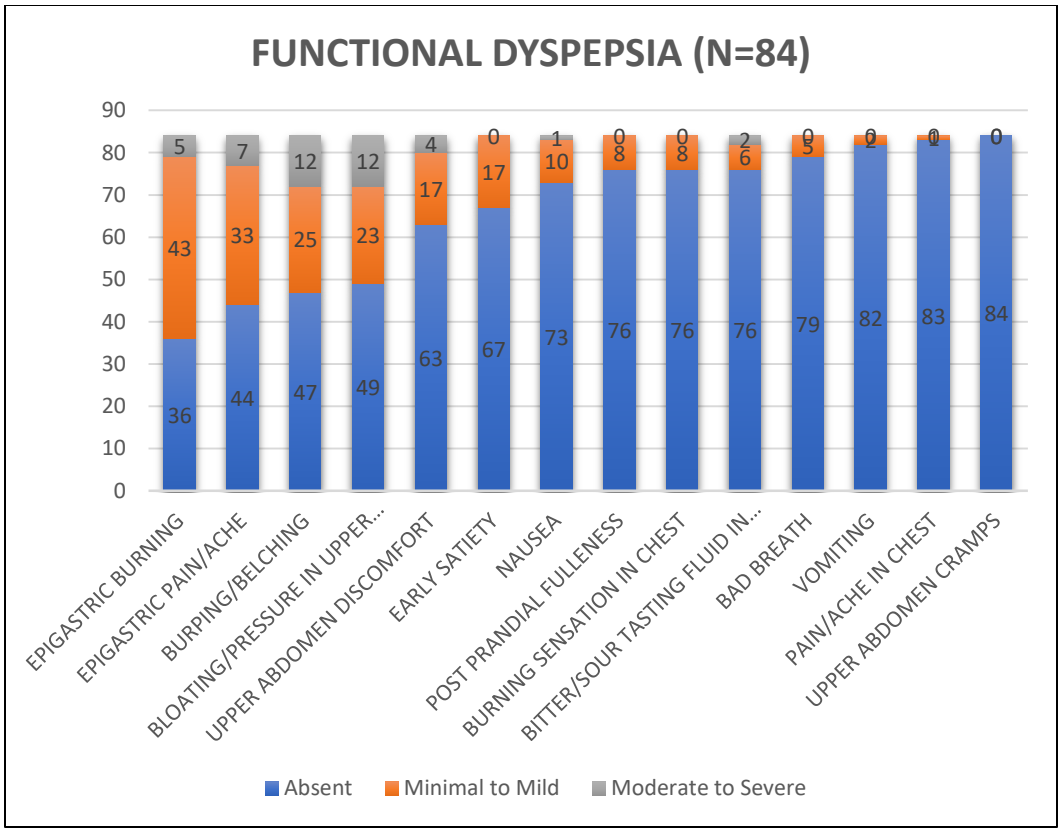


Figure 12A DYSPESIA SYMTOPMS COMPLEX AMONG FUNCTIONAL DYSPEPSIA PATIENTS

Table 10B DYSPESIA SYMTOPMS COMPLEX AMONG ORGANIC DYSPEPSIA PATIENTS

SYMPTOMS COMPLEX	Present	Absent	Minimal	Moderate
EPIGASTRIC BURNING	8	8	6	2
EPIGASTRIC PAIN/ACHE	6	10	5	1
UPPER ABDOMEN DISCOMFORT	6	10	5	1
BLOATING/PRESSURE IN UPPER ABDOMEN	6	10	5	1
BURPING/BELCHING	6	10	6	0
EARLY SATIETY	3	13	2	1
BITTER/SOUR TASTING FLUID IN THROAT/MOUTH	3	13	2	1
NAUSEA	3	13	3	0
BURNING SENSATION IN CHEST	2	14	2	0
POST PRANDIAL FULLENESS	1	15	1	0
BAD BREATH	1	15	1	0
UPPER ABDOMEN CRAMPS	0	16	0	0
PAIN/ACHE IN CHEST	0	16	0	0
VOMITING	0	16	0	0

In this group of 16 organic dyspepsia cases, epigastric burning is the most common symptom, present in 8 cases. Epigastric pain/ache, upper abdomen discomfort, bloating/pressure in the upper abdomen, and burping/belching are equally prevalent, each occurring in 6 cases. Early satiety, bitter/sour tasting fluid in throat/mouth, and nausea are less common, each present in 3 cases. Most symptoms, when present, tend to be minimal in severity. Epigastric burning shows the highest number of moderate cases (2), while most other symptoms have 0 or 1 moderate case. Notably, upper abdomen cramps, pain/ache in chest, and vomiting are completely absent in all 16 cases. This data indicates that while epigastric and upper abdominal symptoms are common in organic dyspepsia, they are generally mild, and severe manifestations are infrequent.

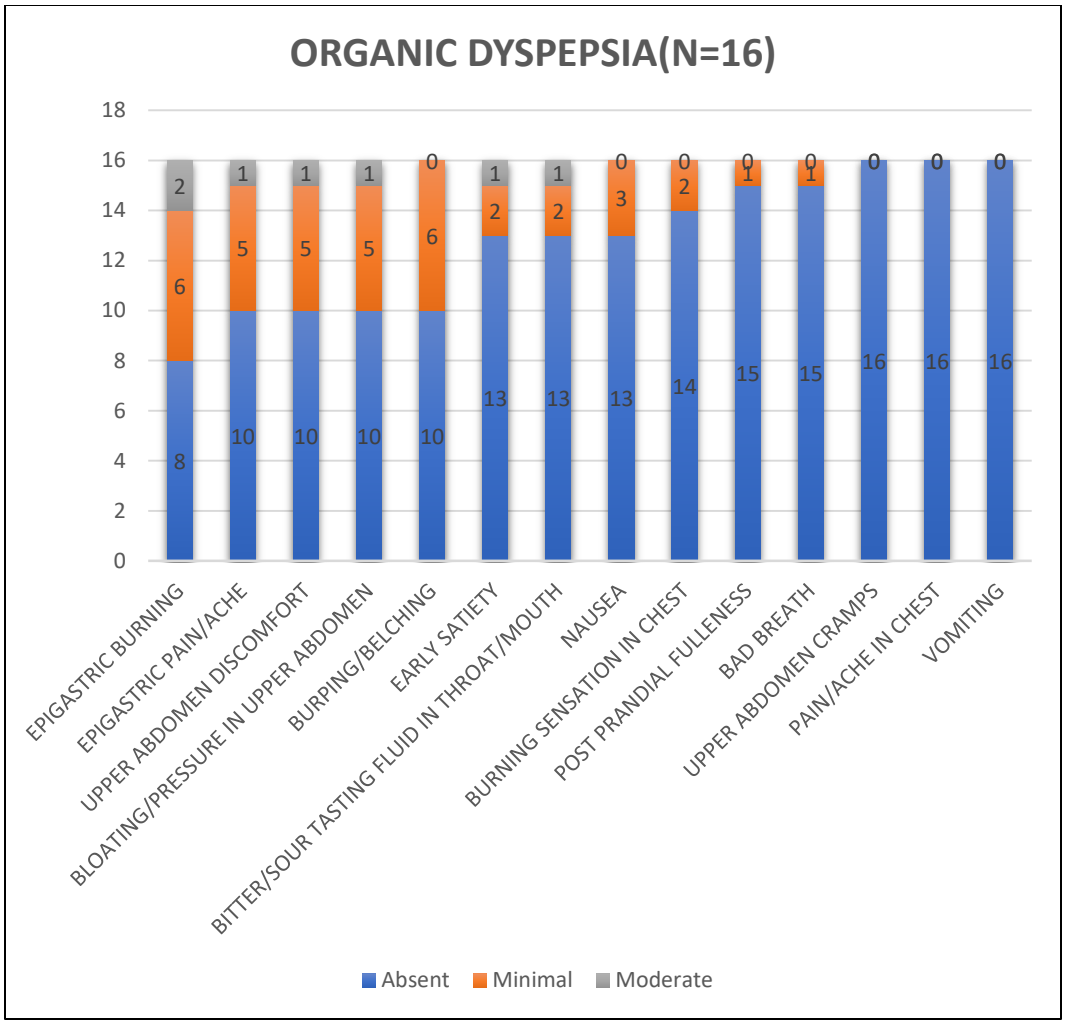


Figure 12B DYSPESIA SYMTOPMS COMPLEX AMONG ORGANIC DYSPEPSIA PATIENTS

Table 11 MEDICATIONS INTAKE DATA OF DYSPEPSIA PATIENTS

		DYSPEPSIA TYPE				Total
		FD		OD		
MEDICATIONS INTAKE_PPI	N	12	14%	1	6%	13
	Y	72	86%	15	94%	87
H2RA	N	74	88%	14	88%	88
	Y	10	12%	2	13%	12
PROKINETICS	N	73	87%	13	81%	86
	Y	11	13%	3	19%	14
CENTRAL NEUROMODULATOR	N	57	68%	11	69%	68
	Y	27	32%	5	31%	32

Proton pump inhibitors (PPIs) were used by 86% of FD patients and 94% of OD patients. Histamine-2 receptor antagonists (H2RAs) were used by 12% of FD patients and 13% of OD patients, with the majority not using these medications (88% in both groups). Prokinetics were used by 13% of FD patients and 19% of OD patients, with the remainder of the patients not using them (87% of FD and 81% of OD). Central neuromodulators were utilized by 32% of FD patients and 31% of OD patients, while 68% of FD and 69% of OD patients did not use them.

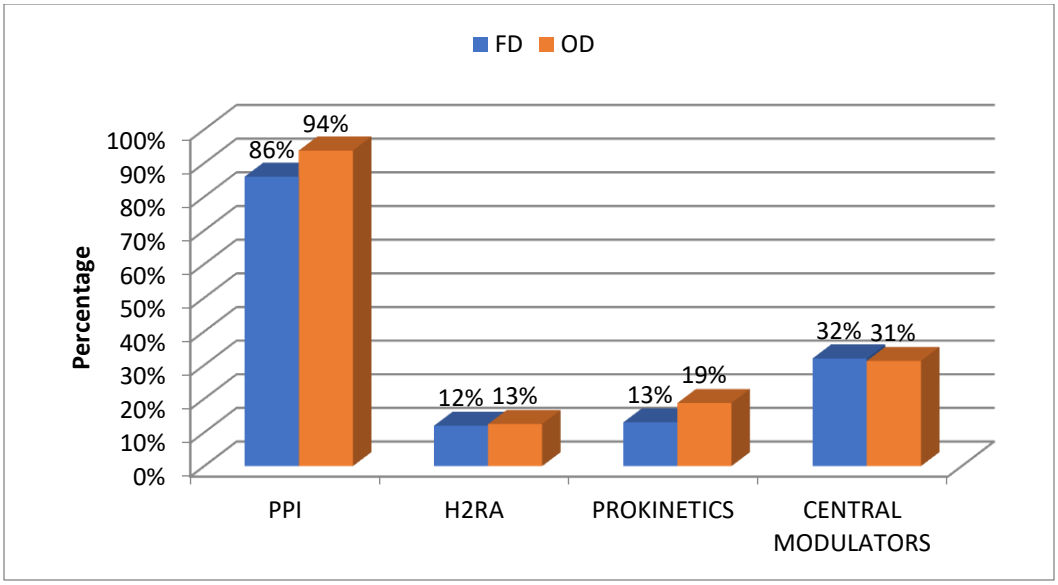


Figure 13 MEDICATIONS INTAKE DATA OF DYSPEPSIA PATIENTS

Table 12 DATA ON BLOOD INVESTIGATIONS

		Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
HB	FD	11.41	2.17	0.31	10.79	12.03	7.40	16.70
	OD	12.18	2.50	0.69	10.67	13.70	7.30	15.20
TLC	FD	7.94	2.16	0.31	7.33	8.56	3.40	14.00
	OD	7.26	1.72	0.48	6.22	8.30	4.05	9.70
PLATELETS	FD	230.04	78.90	11.16	207.62	252.46	88.00	422.00
	OD	227.38	68.61	19.03	185.93	268.84	126.00	383.00
TSH	FD	2.81	1.96	0.46	1.84	3.78	0.29	8.40
	OD	3.45	1.92	0.86	1.06	5.83	1.98	6.73
CREATININE	FD	0.83	0.33	0.06	0.71	0.95	0.39	1.90
	OD	0.83	0.33	0.12	0.53	1.13	0.60	1.53

SGOT	FD	30.57	12.65	1.84	26.86	34.29	12.00	70.00
	OD	27.36	10.40	3.14	20.37	34.35	13.00	48.00
SGPT	FD	32.96	17.72	2.59	27.75	38.16	10.00	75.00
	OD	35.82	30.42	9.17	15.38	56.25	17.00	121.00
ANTI-TTG	FD	0.44	0.58	0.14	0.14	0.74	0.01	2.40
	OD	56.80	74.39	28.12	-12.00	125.60	0.10	160.00

For total leukocyte count, FD patients have a mean of 7.94 x 10^3/µL (SD = 2.16), whereas OD patients have a slightly lower mean of 7.26 x 10^3/µL (SD = 1.72). Platelet counts are comparable between the two groups, with FD patients averaging 230.04 x 10^3/µL (SD = 78.90) and OD patients 227.38 x 10^3/µL (SD = 68.61). Thyroid-stimulating hormone (TSH) levels are slightly higher in OD patients (mean = 3.45 µIU/mL, SD = 1.92) compared to FD patients (mean = 2.81 µIU/mL, SD = 1.96). Creatinine levels are identical in both groups with a mean of 0.83 mg/dL and similar standard deviations. SGOT levels are higher in FD patients (mean = 30.57 IU/L, SD = 12.65) compared to OD patients (mean = 27.36 IU/L, SD = 10.40), while SGPT levels are higher in OD patients (mean = 35.82 IU/L, SD = 30.42) compared to FD patients (mean = 32.96 IU/L, SD = 17.72).

Lastly, anti-TTG levels show a dramatic difference, with FD patients having a mean of 0.44 (SD = 0.58) and OD patients a significantly higher mean of 56.80 (SD = 74.39).

Table 13 FREQUENCY OF DIFFERENT ULTRASONOGRAPHIC FINDINGS AMONG DYSPEPSTIC PATIENTS

USG FINDINGS	FD	OD	TOTAL
NOT AVAILABLE	28	7	35
NO SONOGRAPHIC ABNORMALITY	28	3	31
FATTY LIVER	18	2	20
CHOLELITHIASIS	0	3	3
POLYCYTIC KIDNEY	2	0	2
UTERINE FIBROID	1	0	1
PROSTATOMEGALY	2	0	2
RENAL PARENCHYMAL CHANGES	1	0	1
THICKENED ENDOMETRIUM	1	0	1
RENAL CALCULI	1	0	1
ECTOPIC KIDNEY	1	0	1
CHOLECYSTITIS	0	1	1
CYSTITIS	1	0	1
TOTAL	84	16	100

For FD patients, 28 had no available ultrasound findings, and another 28 showed no sonographic abnormalities. Fatty liver was observed in 18 FD patients, whereas only 2 OD patients had this condition. Cholelithiasis was present in 3 OD patients but none in FD patients. Other findings in FD patients included polycystic kidney (2 cases), uterine fibroid (1 case), enlarged prostate (2 cases), renal parenchymal changes (1 case), thickened endometrium (1 case), renal calculi (1 case), and ectopic kidney (1 case), with each finding being absent in OD patients. Additionally, cholecystitis and cystitis were noted in 1 OD patient and 1 FD patient, respectively. In total, 84 FD patients and 16 OD patients were assessed, with a combined total of 100 cases.

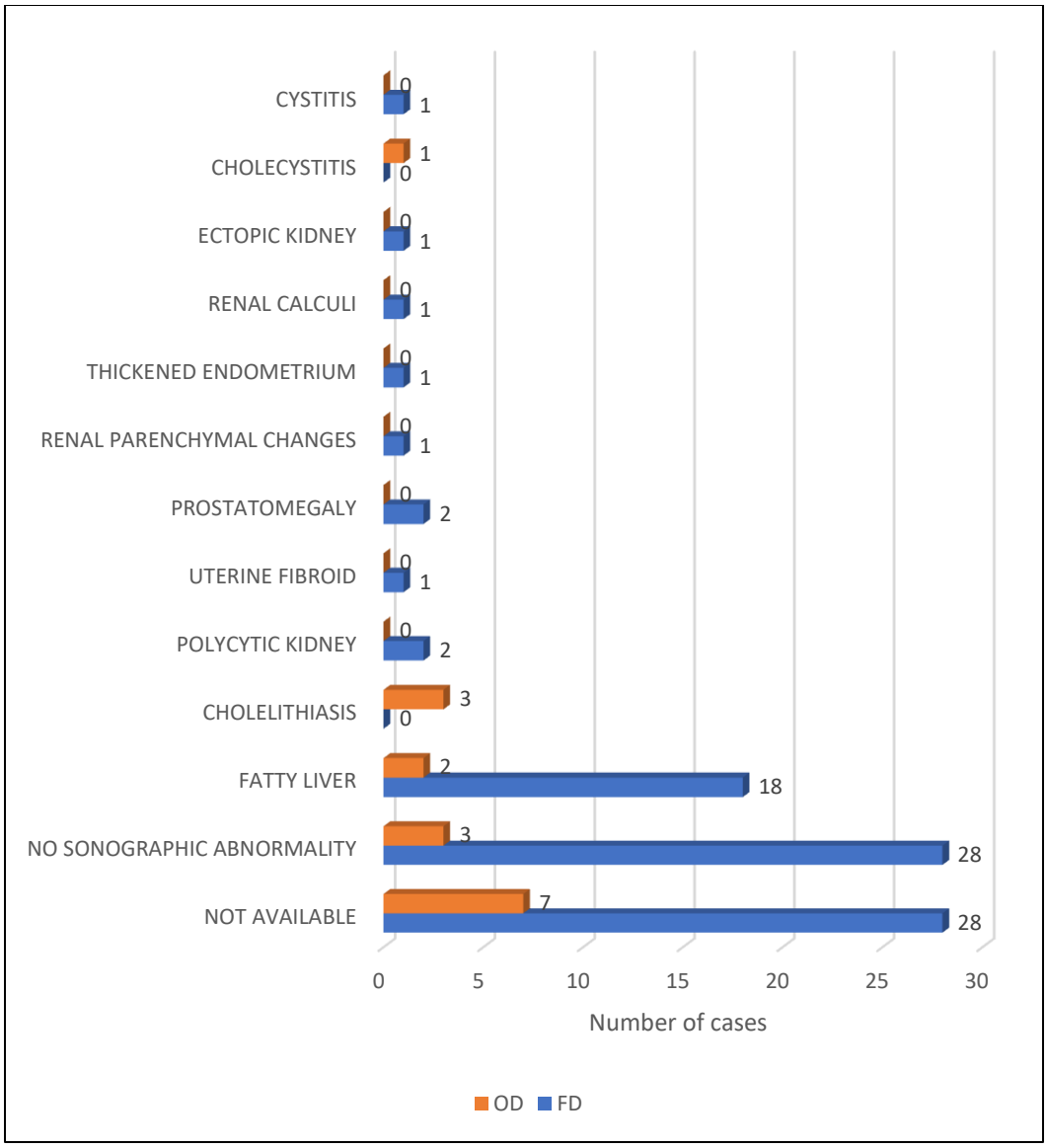


Figure 14 FREQUENCY OF DIFFERENT ULTRASONOGRAPHIC FINDINGS AMONG DYSPEPSTIC PATIENTS

Table 14 FREQUENCY OF DIFFRENT UPPER GASTROINTESTINAL TRACT ENDOSCOPIC FINDINGS AMONG DYSPEPSIA PATIENTS

ENDOSCOPY FINDINGS	FD	OD	TOTAL
NOT DONE	70	4	74
NO ENDOSCOPIC ABNORMALITY	14	0	14
GERD	0	1	1
GASTRITIS	0	1	1
PEPTIC ULCER DISEASE	0	2	2
BARRETT'S ESOPHAGUS	0	1	1
CELIAC DISEASE	0	4	4
HYPERPLASTIC POLYP	0	1	1
H.PYLORI INFECTION,RUT+	0	2	2
TOTAL	84	16	100

Among the 84 FD patients, the majority (70) did not undergo endoscopy, likely due to the absence of alarm symptoms or clinical indications. Of the 14 FD patients who did have endoscopy, all showed no endoscopic abnormalities, which is consistent with the functional nature of their condition. In contrast, all 16 OD patients underwent endoscopy, with each showing some form of organic pathology. The most common finding among OD patients was Celiac disease, identified in 4 cases, followed by peptic ulcer disease and H. pylori infection, each found in 2 cases. Other findings in OD patients included GERD, gastritis, Barrett's esophagus, and a hyperplastic polyp, each occurring in one case.

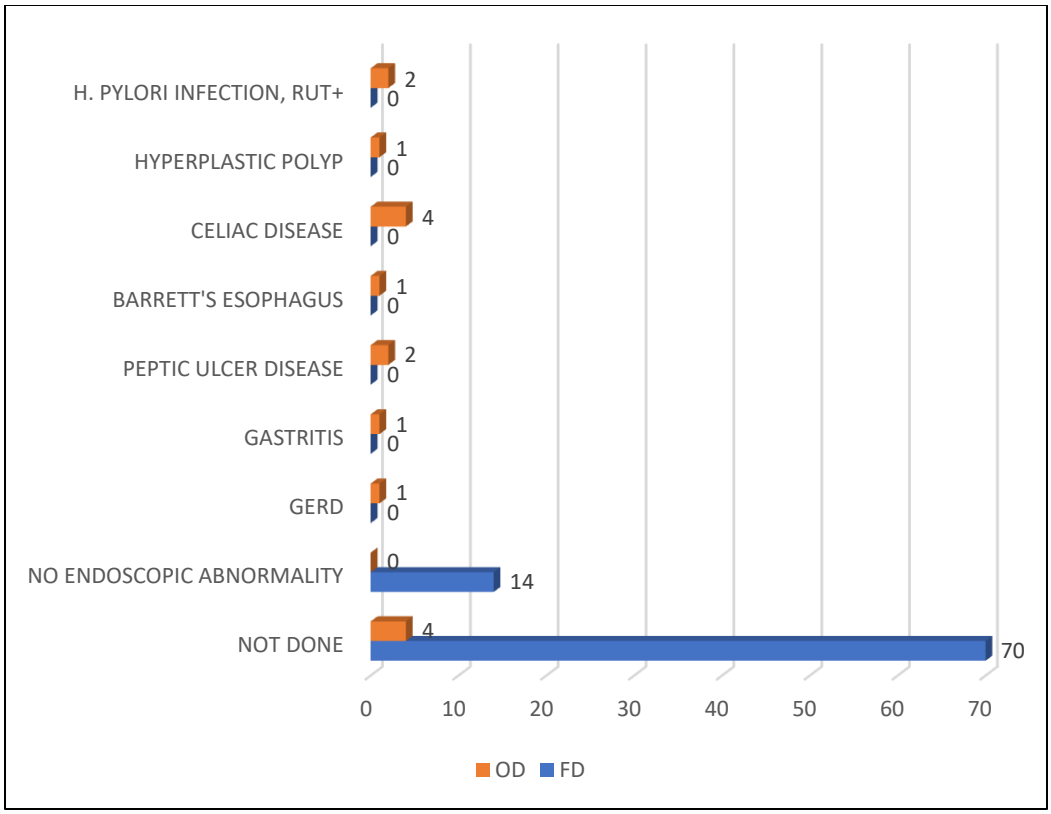


Figure 15 FREQUENCY OF DIFFRENT UPPER GASTROINTESTINAL TRACT EDOSCOPIC FINDINGS AMONG DYSPEPSIA PATIENTS

Table 15 DYSPEPSIA AND CORONAVIRUS DISEASE 2019

		DYSPEPSIA TYPE				Total
		FD		OD		
COVID STATUS	NO	82	98%	16	100%	98
	YES	2	2%	0	0%	2
NO. OF VACCINATIONS	1	8	10%	0	0%	8
	2	55	65%	13	81%	68
	3	9	11%	1	6%	10
	NOT VACCINATED	4	5%	0	0%	4
	DON'T KNOW	8	10%	2	13%	10
NAME OF VACCINE	COVAXIN	11	13%	0	0%	11
	COVISHIELD	28	33%	8	50%	36
	NOT VACCINATED	4	5%	0	0%	4
	DON'T KNOW	41	49%	8	50%	49

For functional dyspepsia (FD) patients, 98% were uninfected with COVID-19, while only 2% were infected. In contrast, all organic dyspepsia (OD) patients were uninfected. Regarding vaccination, 65% of FD patients had received 2 doses, compared to 81% of OD patients. Only 10% of FD patients had received 1 dose, and 11% had received 3 doses, whereas 6% of OD patients had received 3 doses. A small proportion of FD patients were either not vaccinated (5%) or did not know their vaccination status (10%), whereas no OD patients were unvaccinated. For vaccine types, 33% of FD patients had received Covishield, 13% had received Covaxin, and 49% did not know their vaccine type. Among OD patients, 50% had received Covishield, none had received Covaxin, and 50% did not know their vaccine type.

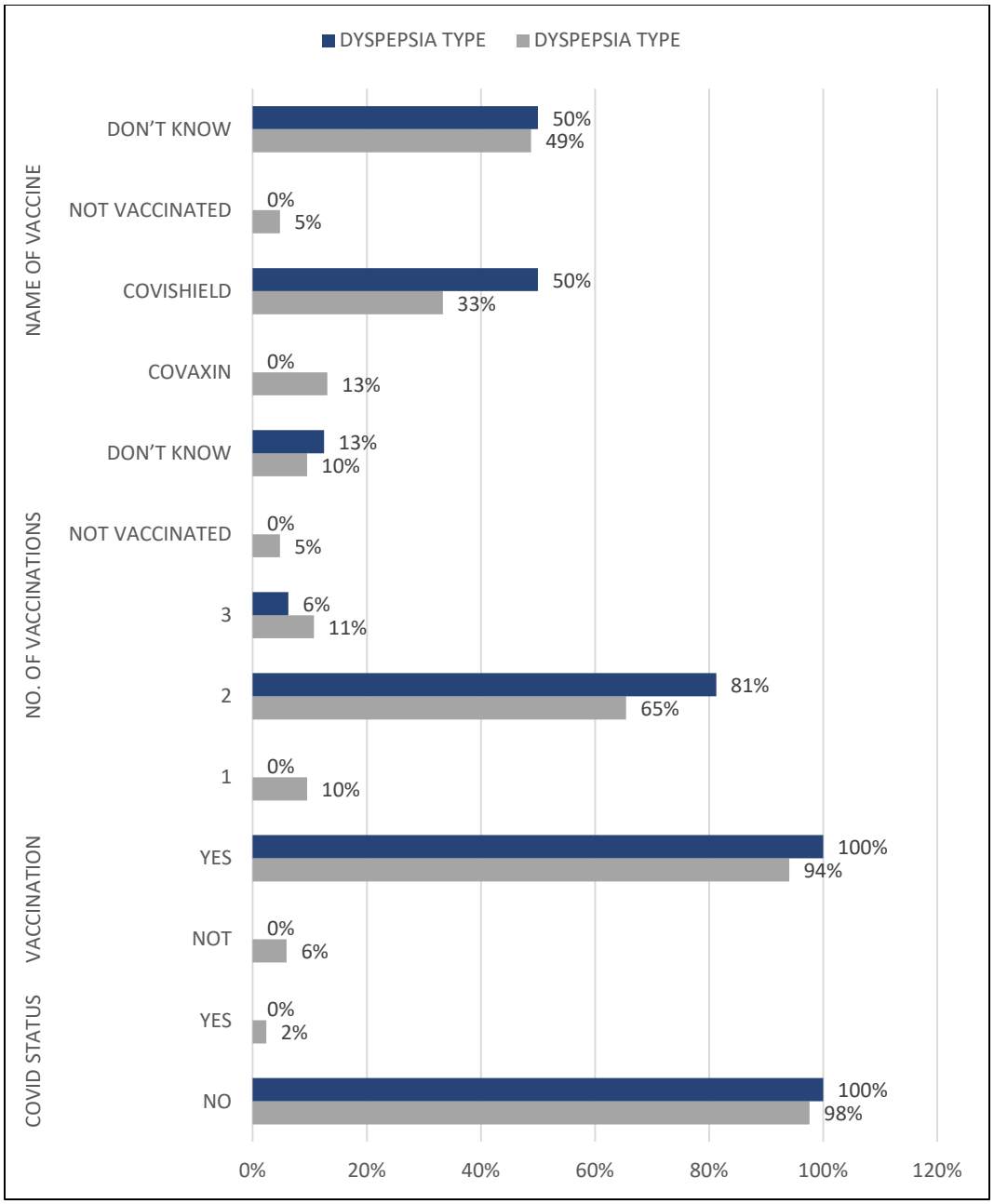


Figure 16 DYSPEPSIA AND CORONAVIRUS DISEASE 2019

Table 16 COMAPARISON OF CO MORBIDITIES AS RISK FACTORS OF DYSPEPSIA

CO MORBIDITIES		FD		OD		CONTROL		Total	Chi-square value	p-value
		No.	%age	No.	%age	No.	%age			
DIABETES MELLITUS	ABSENT	75	89%	15	94%	90	90%	180	0.298	0.862
	PRESENT	9	11%	1	6%	10	10%	20		
HYPERTENSION	ABSENT	72	86%	15	94%	74	74%	161	5.936	0.051
	PRESENT	12	14%	1	6%	26	26%	39		
CORONARY ARTERY DISEASE	ABSENT	83	99%	16	100%	95	95%	194	2.815	0.245
	PRESENT	1	1%	0	0%	5	5%	6		
CHRONIC KIDNEY DISEASE	ABSENT	84	100%	16	100%	97	97%	197	3.046	0.218
	PRESENT	0	0%	0	0%	3	3%	3		
THYROID DISEASE	ABSENT	82	98%	16	100%	98	98%	196	0.000	1.000
	PRESENT	2	2%	0	0%	2	2%	4		
OTHERS	ANXIETY	1	1%	0	0%	0	0%	1	18.446	0.781
	BETA THALASSEMIA	1	1%	0	0%	0	0%	1		
	COPD	1	1%	0	0%	1	1%	2		
	DEPRESSION	2	2%	0	0%	0	0%	2		
	DYSLIPIDEMIA	2	2%	0	0%	0	0%	2		
	EPILEPSY	1	1%	0	0%	0	0%	1		
	OSTEOPOROSIS	1	1%	0	0%	0	0%	1		
	PROSTATOMEGALY	0	0%			1	1%	1		
	RHEUMATOID ARTHRITIS	1	1%	0	0%	2	2%	3		
	SEIZURE DISORDER	1	1%	0	0%	0	0%	1		

Diabetes mellitus is present in 11% of FD patients, 6% of OD patients, and 10% of the control group, with the majority of individuals in all groups not having diabetes (89% FD, 94% OD, 90% control). Hypertension is observed in 14% of FD patients, 6% of OD patients, and 26% of controls, indicating a higher prevalence in the control group compared to FD and OD patients. Coronary artery disease is rare, affecting only 1% of FD patients and none of the OD patients, while it is seen in 5% of the control group. Chronic kidney disease is absent in FD and OD patients but present in 3% of controls. Thyroid disease affects 2% of FD and control group participants, but none of the OD patients. Other conditions, including anxiety, beta thalassemia, COPD, depression, dyslipidemia, epilepsy, osteoporosis, and rheumatoid arthritis, are reported in a small percentage of FD patients. Prostatomegaly and seizure disorders are noted in the control group (1% and 2%, respectively). Overall, FD patients generally exhibit lower prevalence rates of these chronic conditions compared to the control group, with OD patients showing similar or slightly better profiles.

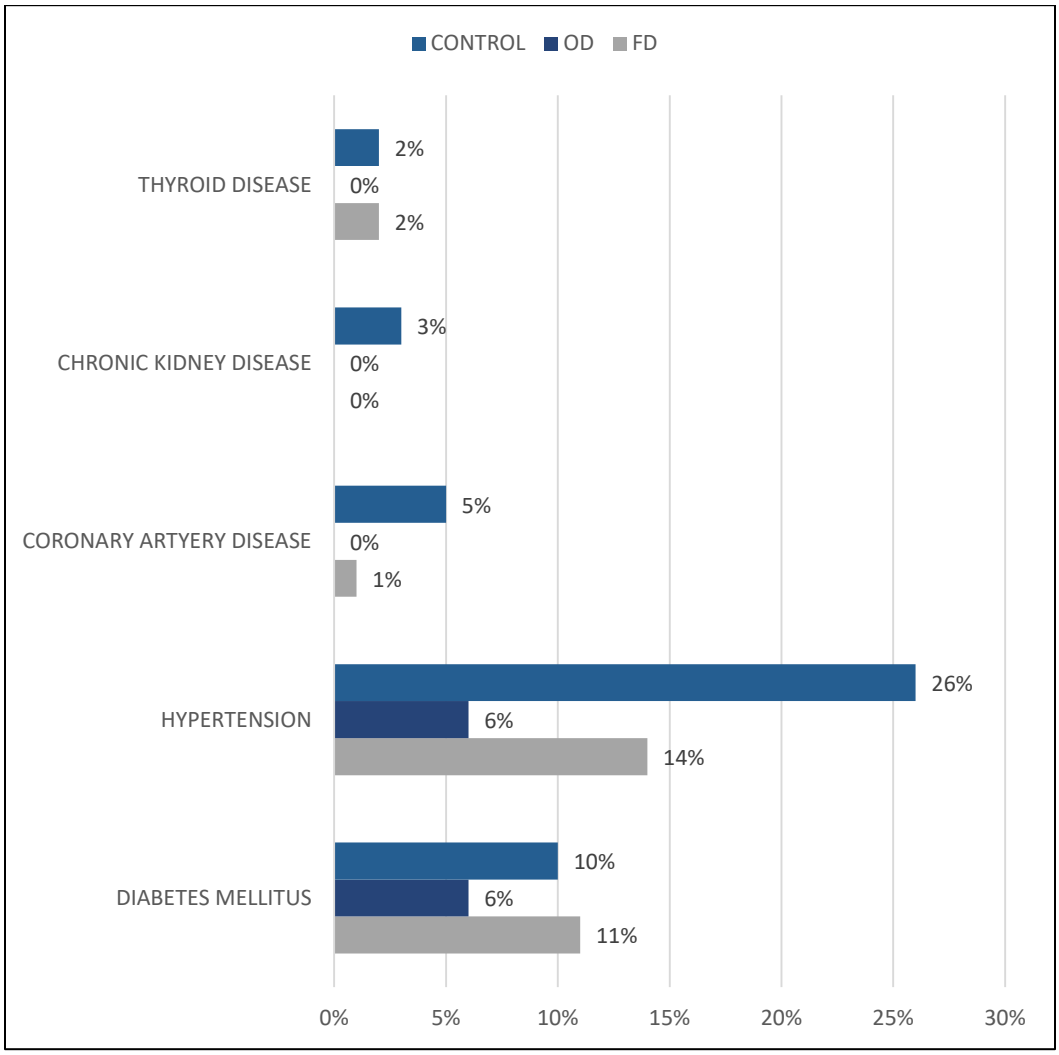


Figure 17 COMAPARISON OF CO MORBIDITIES AS RISK FACTORS OF DYSPEPSIA

Table 17 COMPARISON OF ADDICTIONS AS RISK FACTORS OF DYSPEPSIA

SUBSTANCE ABUSE		DYSPEPSIA TYPE				Total
		FD		OD		
ALCOHOL	N	75	89%	15	94%	90
	Y	9	11%	1	6%	10
SMOKING	N	79	94%	16	100%	95
	Y	5	6%	0	0%	5
TOBACCO CHEWING	N	83	99%	16	100%	99
	Y	1	1%	0	0%	1
OPOIDS	N	83	99%	16	100%	99
	Y	1	1%	0	0%	1
OTHER	Y	2	2%	0	0%	2
	N	82	98%	16	100%	98

For alcohol consumption, 11% of FD patients and 6% of OD patients reported use, while the majority in both groups abstain (89% FD, 94% OD). Smoking is reported by 6% of FD patients and none of the OD patients, with 94% of FD patients and all OD patients not smoking. Tobacco chewing and opioid use are very infrequent, with 1% of FD patients and none of the OD patients engaging in these activities. Additionally, 2% of FD patients reported using other substances, while all OD patients did not. Overall, substance abuse is relatively low in both FD and OD patients, with smoking and opioid use being the least common among the substances assessed.

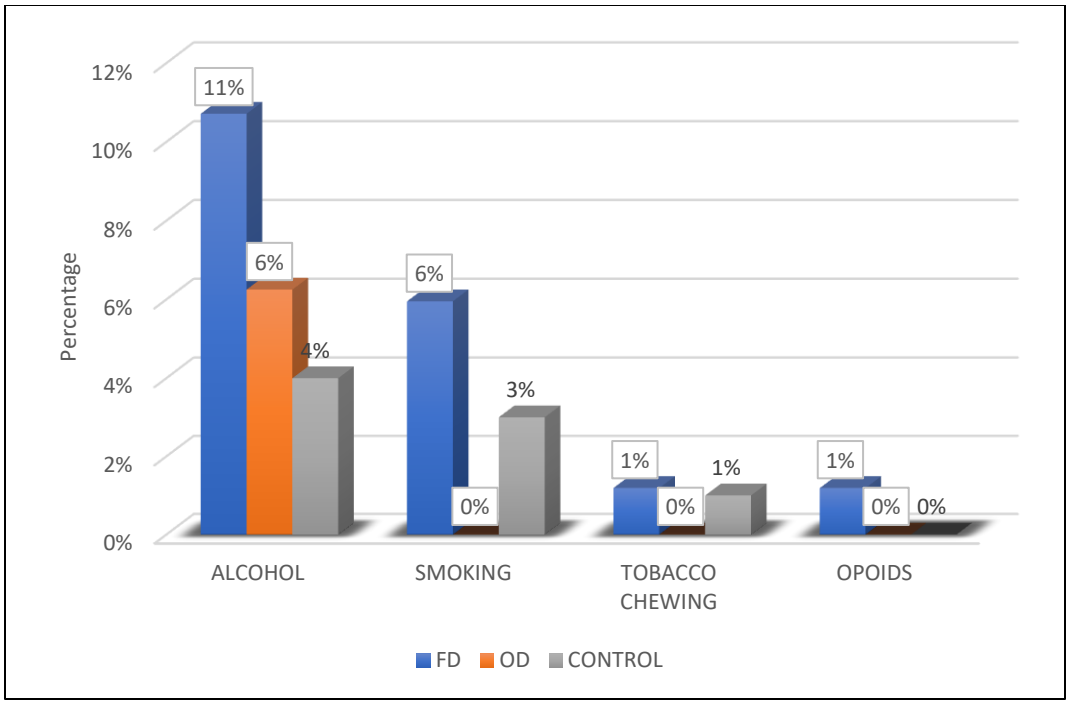


Figure 18 COMPARISON OF ADDICTIONS AS RISK FACTORS OF DYSPEPSIA

Table 18 TYPE OF DIET AMONG STUDY PARTICIPANTS

		FD		OD		CONTROL		Total	Chi-square value	p-value
		N	%	N	%	N	%			
DIET TYPE	NON-VEG	25	30%	7	44%	20	20%	52	5.109	0.078
	VEG	59	70%	9	56%	80	80%	148		

In the FD group, 30% consume a non-vegetarian diet, while 70% follow a vegetarian diet. In contrast, 44% of OD patients are non-vegetarians, with 56% adhering to a vegetarian diet. Among the control group, 20% are non-vegetarians and 80% are vegetarians. The chi-square test yields a value of 5.109 with a p-value of 0.078, indicating that while there is a trend towards dietary differences among the groups, the association is not statistically significant at the conventional level of 0.05. This suggests that diet type, though showing some variation among the groups, does not have a strong enough relationship with dyspepsia type to be considered a significant factor.

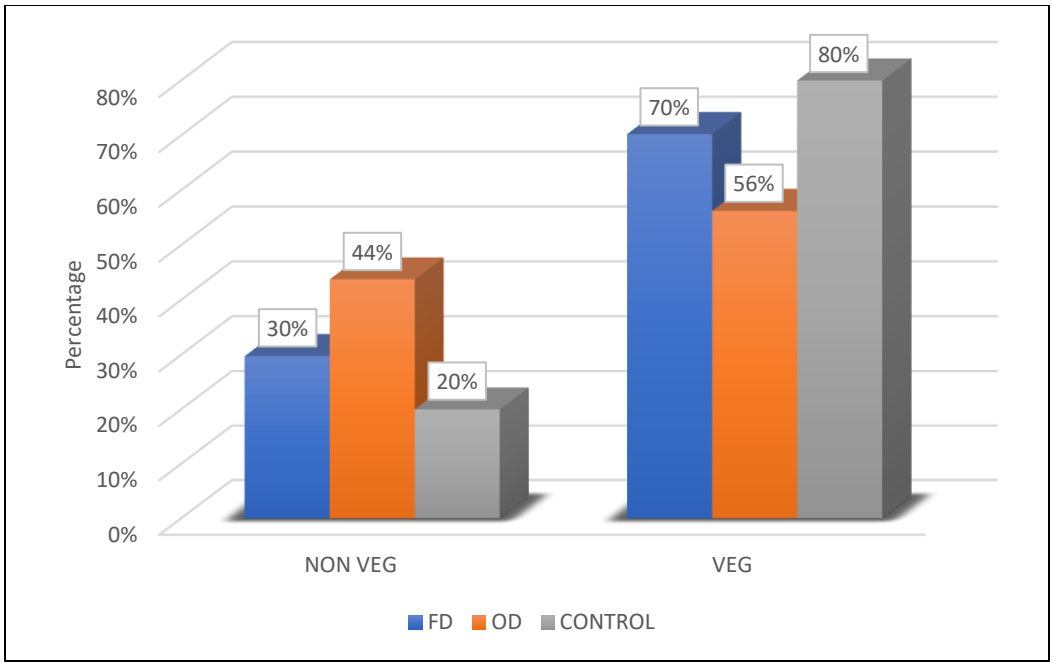


Figure 19 TYPE OF DIET AMONG STUDY PARTICIPANTS

Table 19 FREQUENCIES OF MEALS PER DAY AMONG STUDY PARTICIPANTS

	FD		OD		CONTROL		Total	Chi-square value	p-value
MEALS PER DAY	N	%	N	%	N	%			
1	0	0%	0	0%	0	0%	0	0.000	1.000
2	34	40%	5	31%	13	13%	52	18.162	**0.001**
3	48	57%	11	69%	86	86%	145	19.190	**0.001**
4	1	1%	0	0%	0	0%	1	1.388	0.500
5	0	0%	0	0%	0	0%	0	0.000	1.000
6	1	1%	0	0%	1	1%	2	0.192	0.908

In the FD group, 40% of patients eat 2 meals per day, while 57% have 3 meals per day, and only 1% each have 4 or 6 meals per day. In the OD group, 31% eat 2 meals per day, 69% have 3 meals per day, and there are no patients with 4 or 5 meals per day. Among the control group, 13% consume 2 meals per day, 86% have 3 meals per day, and 1% each have 6 meals per day.Thechi-square tests reveal a value of 18.162 with a p-value of 0.001 for the comparison of meal frequency between groups, indicating a statistically significant difference. This suggests that the frequency of meals per day varies significantly among FD, OD, and control groups, with FD and OD patients predominantly having 3 meals a day, while the control group shows a similar trend but with fewer individuals having 2 meals per day. The p-values for meal frequencies of 2 and 3 meals per day are particularly low (0.001), highlighting a strong association between meal frequency and dyspepsia type.

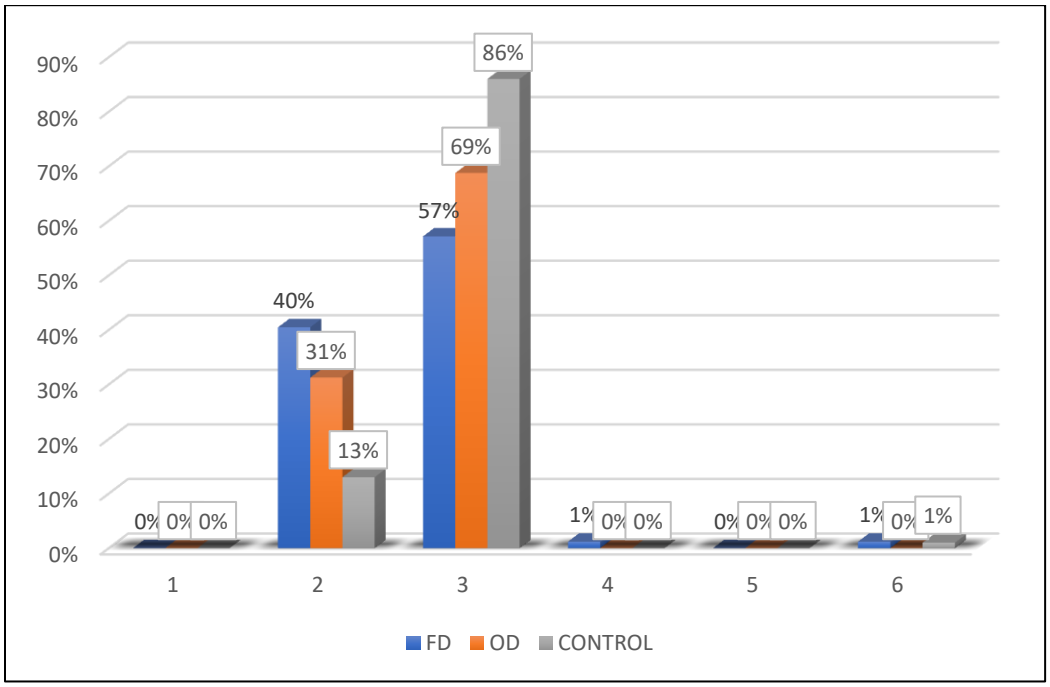


Figure 20 FREQUENCIES OF MEALS PER DAY AMONG STUDY PARTICIPANTS

Table 20 COMPARISON OF EATING SPEED AMONG STUDY PARTICIPANTS

		FD		OD		CONTROL		Total	Chi-square value	p-value
		N	%	N	%	N	%			
EATING SPEED	FAST	26	31%	4	25%	11	11%	41	16.815	**0.002**
	MODERATE	39	46%	8	50%	74	74%	121		
	SLOW	19	23%	4	25%	15	15%	38		

In the FD group, 31% of patients eat quickly, 46% eat at a moderate pace, and 23% eat slowly. For OD patients, 25% eat quickly, 50% eat at a moderate pace, and 25% eat slowly. Among the control group, only 11% eat quickly, 74% eat at a moderate pace, and 15% eat slowly.

The chi-square test yields a value of 16.815 with a p-value of 0.002, indicating a statistically significant difference in eating speed among the groups. This result suggests that eating speed is notably different between FD, OD, and control groups. Specifically, FD patients have a higher proportion of fast eaters compared to controls, while OD patients' eating speeds are more evenly distributed between fast and moderate compared to the controls. The low p-value reflects a strong association between eating speed and dyspepsia type, highlighting that eating speed is a significant factor in distinguishing between FD, OD, and control groups.

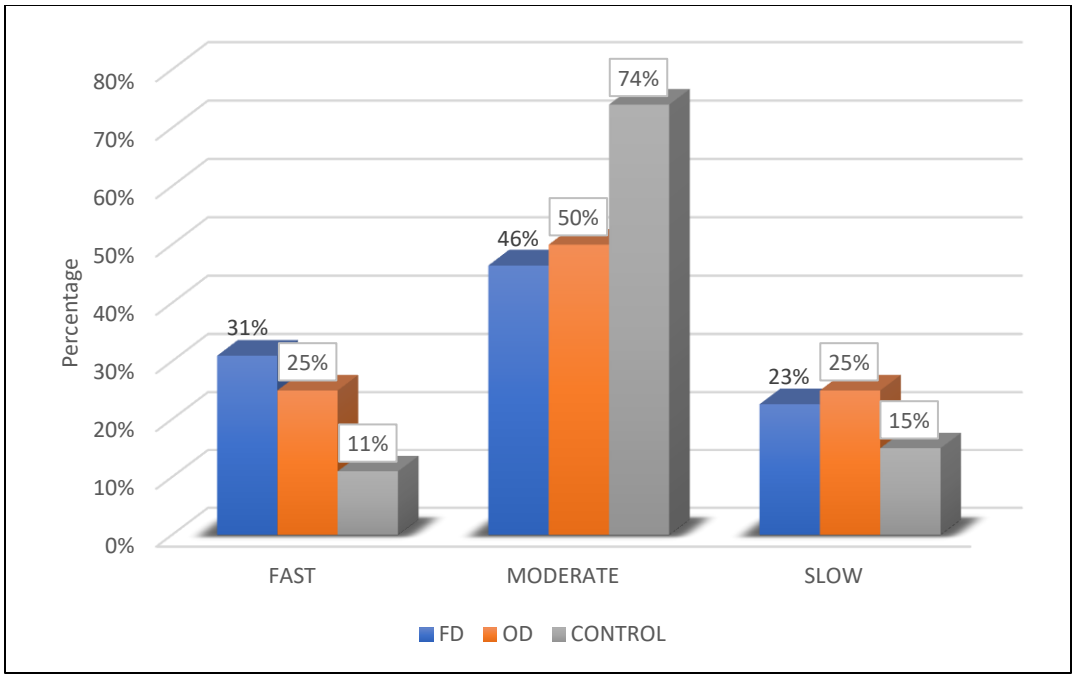


Figure 21 COMPARISON OF EATING SPEED AMONG STUDY PARTICIPANTS

Table 21 COMPARISON OF LEVEL OF ACTIVITIES AMONG STUDY PARTICIPANTS

		FD		OD		CONTROL		Total	Chi-square value	p-value
		N	%	N	%	N	%			
LEVEL OF ACTIVITY	HARD	3	4%	1	6%	1	1%	5	10.411	**0.034**
	MODERATE	21	25%	5	31%	46	46%	72		
	SEDENTARY	60	71%	10	63%	53	53%	123		

In the FD group, 4% of patients engage in hard physical activities, 25% have a moderate level of activity, and 71% are sedentary. For OD patients, 6% are involved in hard activities, 31% have moderate activity levels, and 63% are sedentary. Among the control group, only 1% participate in hard activities, 46% have moderate activity levels, and 53% are sedentary.

The chi-square test yields a value of 10.411 with a p-value of 0.034, indicating a statistically significant difference in the level of physical activity among the groups. Specifically, FD patients show a higher proportion of sedentary individuals compared to controls, while the OD group also has a notable proportion of sedentary individuals but with more moderate activity compared to FD patients.

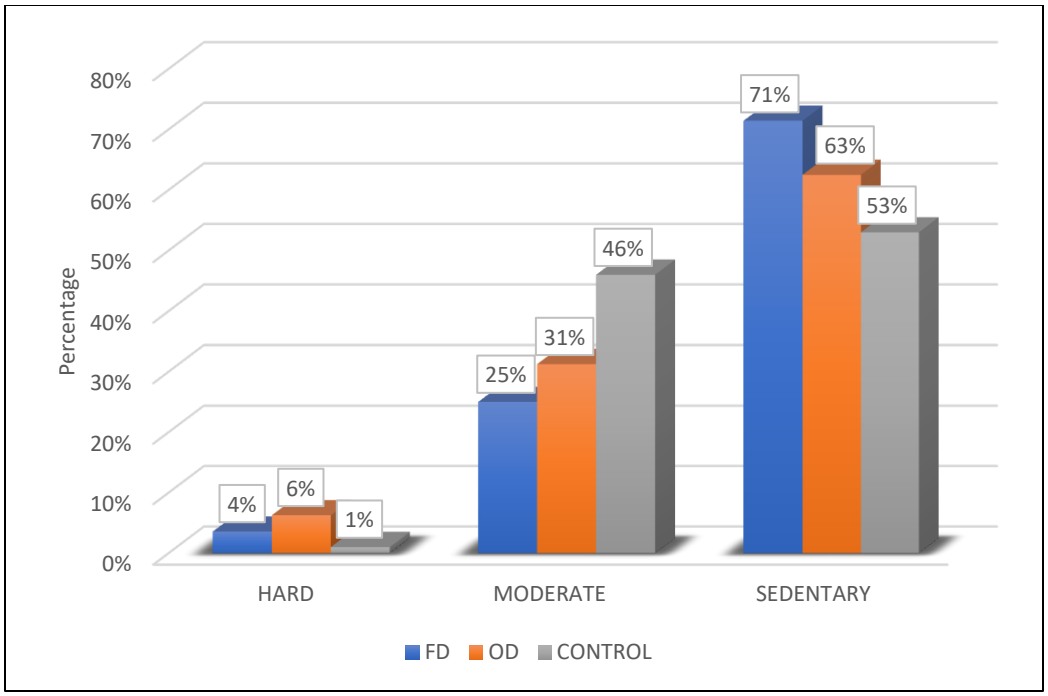


Figure 22 COMPARISON OF LEVEL OF ACTIVITIES AMONG STUDY PARTICIPANTS

Table 22- COMPARISON OF SELF REPORTED MILK & GLUTEN INTOLERANCE AMONG STUDY PARTICIPANTS

		FD		OD		CONTROL		Total	Chi-square value	p-value
		N	%	N	%	N	%			
SELF REPORTED GLUTEN INTOLERANCE	N	84	100%	13	81%	99	99%	196	25.128	0.001
	Y	0	0%	3	19%	1	1%	4		
SELF REPORTED MILK INTOLERANCE	N	77	92%	15	94%	97	97%	189	2.517	0.284
	Y	7	8%	1	6%	3	3%	11		

Regarding gluten intolerance, none of the FD patients reported intolerance, while 19% of OD patients and 1% of control group participants did. This results in a chi-square value of 25.128 with a p-value of 0.001, indicating a statistically significant difference. This suggests that self-reported gluten intolerance is significantly more common among OD patients compared to FD patients and controls.

In contrast, self-reported milk intolerance shows less variation. Among FD patients, 8% reported milk intolerance, compared to 6% of OD patients and 3% of controls. The chi-square test yields a value of 2.517 with a p-value of 0.284, indicating that the differences in milk intolerance are not statistically significant. This suggests that milk intolerance does not vary substantially between FD, OD, and control groups, highlighting that it is not a strong differentiating factor among the groups.

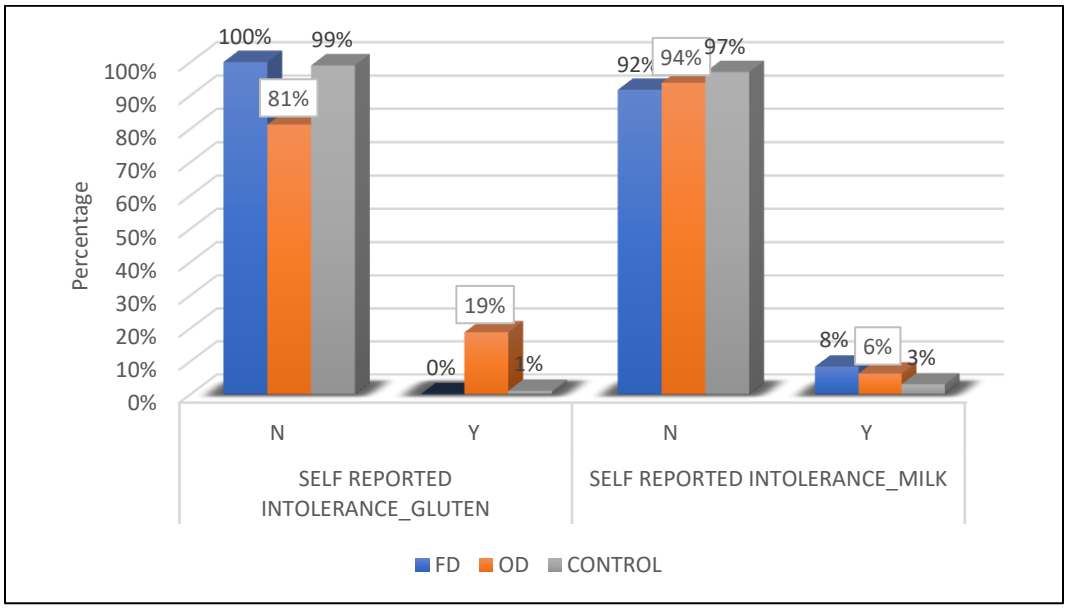


Figure 23- COMPARISON OF SELF REPORTED MILK & GLUTEN INTOLERANCE AMONG STUDY PARTICIPANTS

Table 23- COMPARISON OF SELF REPORTED INTOLERANCE FOR DIFFERENT FOOD ITEMS AMONG STUDY PARTICIPANTS

		CASES		CONTROL		Total	Chi-square value	p-value	Odd ratio	95% CI
		No.	%	No.	%					
SELF REPORTED FOOD INTOLERANCE	SPICES	36	36%	8	8%	44	**22.792**	**0.001**	6.469	2.82-14.83
	CHICKEN	1	1%	0	0%	1	1	0.317		
	FRUITS	0	0%	1	1%	1	1	0.317		
	PAPAYA	1	1%	0	0%	1	1	0.317		
	OILY FOOD	23	23%	4	4%	27	**15.379**	**0.001**	7.169	2.38-21.61
	TEA	7	7%	3	3%	10	1.676	0.196		
	PICKLE	1	1%	0	0%	1	1	0.317		
	POTATO	1	1%	0	0%	1	1	0.317		
	CURD	1	1%	0	0%	1	1	0.317		
	CORN	1	1%	0	0%	1	1	0.317		
	CHICKPEA, RED BEANS	1	1%	0	0%	1	1	0.317		
	SALTY	2	2%	0	0%	1	2.01	0.156		

A significant proportion of cases, 36%, reported intolerance to spices, compared to only 8% of controls. This difference is statistically significant with a chi-square value of 22.792 and a p-value of 0.001. The odds ratio of 6.469 (95% CI: 2.82-14.83) indicates that cases are substantially more likely to report intolerance to spices than controls. Similarly, 23% of cases reported intolerance to oily foods, whereas only 4% of controls did. This difference is also statistically significant, with a chi-square value of 15.379 and a p-value of 0.001, and an odds ratio of 7.169 (95% CI: 2.38-21.61), suggesting a strong association between oily food intolerance and cases. In contrast, no significant differences were found for intolerances to tea, chicken, fruits, papaya, pickle, potato, curd, corn, chickpeas/red beans, and salty foods, as the chi-square values for these items are low, and p-values are not statistically significant. Overall, self-reported intolerance to spices and oily foods is significantly higher among cases, indicating these intolerances may be more closely associated with dyspepsia compared to other foods.

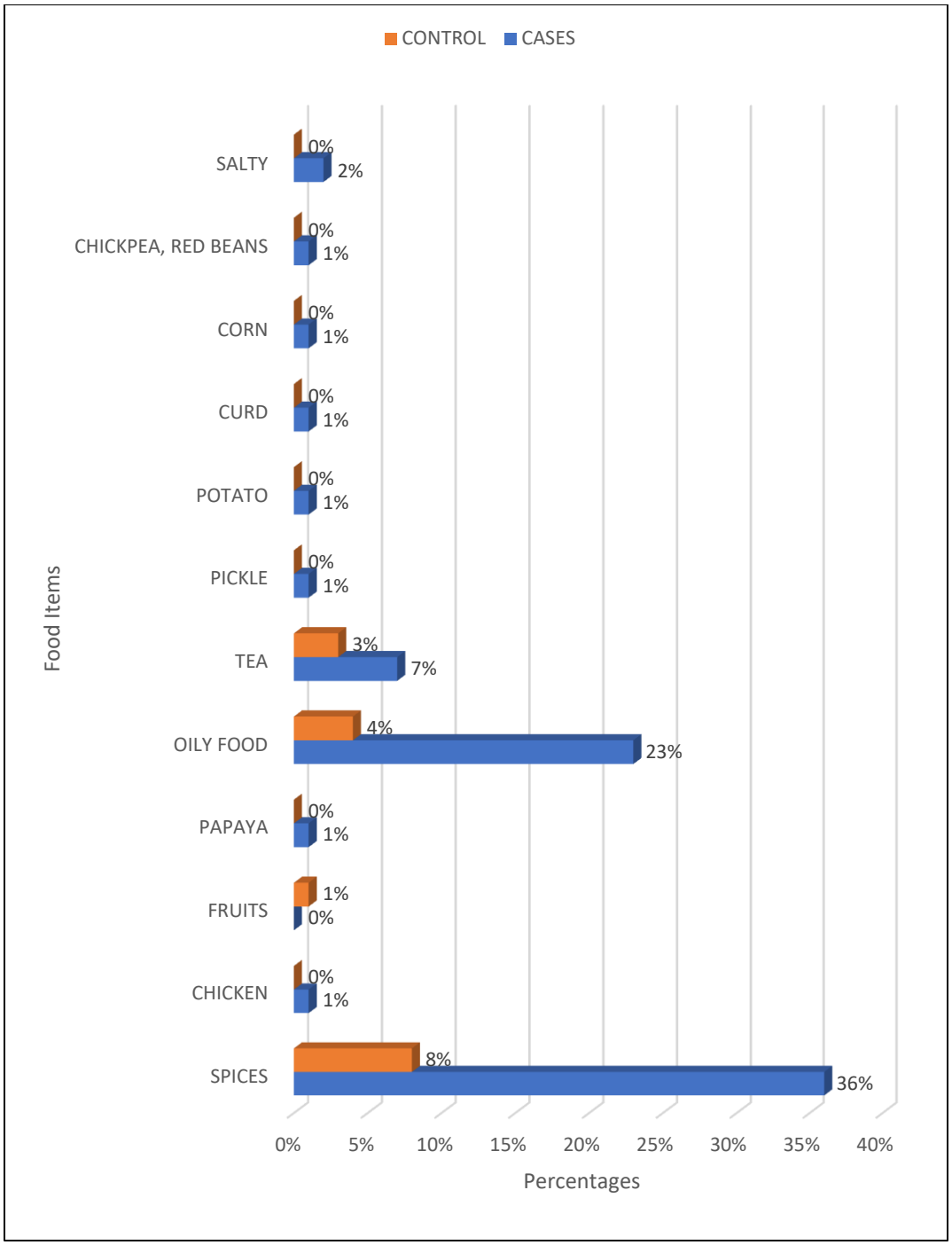


Figure 24- COMPARISON OF SELF REPORTED INTOLERANCE FOR DIFFERENT FOOD ITEMS AMONG STUDY PARTICIPANTS

Table 24A- DISTRIBUTION OF DIFFERENT DYSPEPSIA TYPES ACCORDING TO TOTAL SF-NDI

		DYSPEPSIA TYPE				Total
		FD		OD		
SF-NDI	< 20	78	93%	15	94%	93
	21-30	5	6%	0	0%	5
	> 30	1	1%	1	6%	2

Table 24B- DISTRIBUTION OF DIFFERENT DYSPEPSIA TYPES ACCORDING TO MEAN SF-NDI

		N	Mean	SD	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	F	p-value
						Lower Bound	Upper Bound				
TOTAL VALUE	FD	84	14.74	5.22	0.57	13.61	15.87	10.00	45.00	31.063	**0.001**
	OD	16	15.19	8.31	2.08	10.76	19.62	10.00	45.00		
	CONTROL	100	10.23	0.62	0.06	10.11	10.35	10.00	13.00		

The majority of patients in both FD and OD groups have SF-NDI scores of less than 20, with 93% of FD patients and 94% of OD patients falling into this category. A small percentage, 6% of FD patients, has scores between 21 and 30, while no OD patients fall into this range. Only 1% of FD patients and 6% of OD patients have SF-NDI scores greater than 30.

FD patients have a mean score of 14.74 with a standard deviation of 5.22, while OD patients have a mean score of 15.19 with a standard deviation of 8.31. The F-value of 31.063 with a p-value of 0.001 indicates a statistically significant difference in total value scores among the groups. This result shows that FD and OD patients have significantly higher total value scores compared to controls, with OD patients having the highest scores, although the variability is also greater in this group.

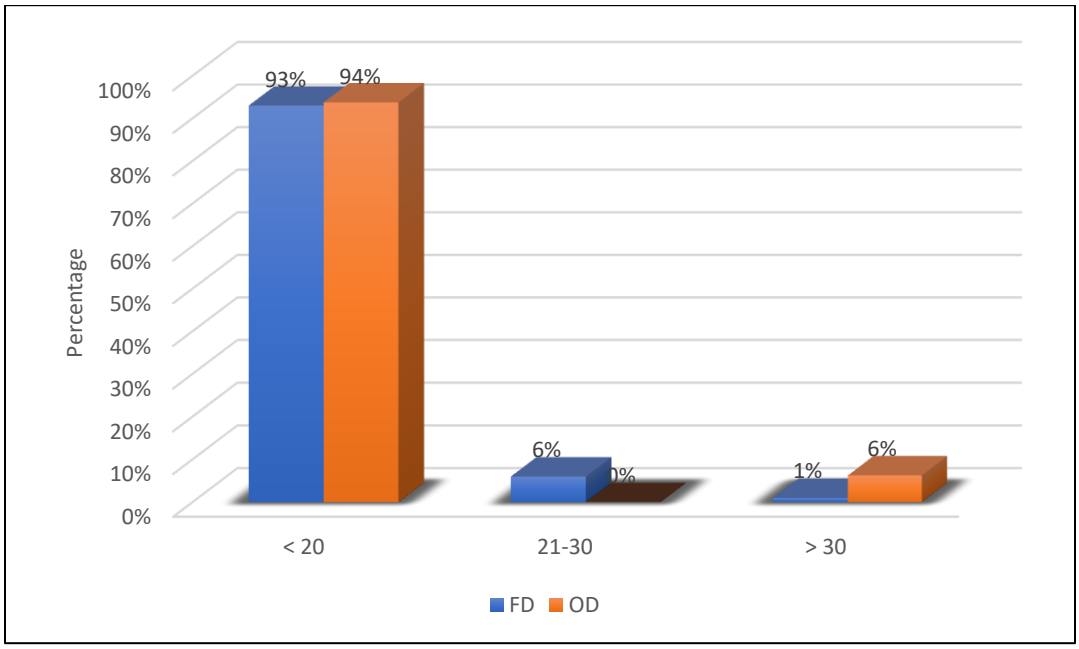


Figure 25- DISTRIBUTION OF DIFFERENT DYSPEPSIA TYPES ACCORDING TO TOTAL SF-NDI

Table 25- COMPARISON BETWEEN DIFFERENT DOMAINS OF QUALITY OF LIFE AMONG DYSPEPSIA PATIENTS

		N	Mean SF-NDI	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
TENSION	FD	84	3.75	2.05	0.22	3.31	4.19	2.00	10.00
	OD	16	3.56	1.97	0.49	2.52	4.61	2.00	10.00
INTERFERENCE WITH DAILY ACTIVITIES	FD	84	2.80	1.51	0.16	2.47	3.13	2.00	10.00
	OD	16	3.06	2.05	0.51	1.97	4.15	2.00	10.00
EATING/DRINKING	FD	84	2.87	1.33	0.15	2.58	3.16	2.00	10.00
	OD	16	3.00	1.26	0.32	2.33	3.67	2.00	6.00
KNOWLEDGE &CONTROL	FD	84	2.56	0.94	0.10	2.36	2.76	2.00	6.00
	OD	16	2.81	1.80	0.45	1.85	3.77	2.00	9.00
WORK/STUDY	FD	84	2.76	1.63	0.18	2.41	3.12	2.00	10.00
	OD	16	2.75	2.05	0.51	1.66	3.84	2.00	10.00
TOTAL VALUE	FD	84	14.74	5.22	0.57	13.61	15.87	10.00	45.00
	OD	16	15.19	8.31	2.08	10.76	19.62	10.00	45.00

In the Tension domain, FD patients report a mean score of 3.75 (SD = 2.05) with a 95% confidence interval between 3.31 and 4.19, indicating a moderate level of tension. OD patients have a slightly lower mean score of 3.56 (SD = 1.97) with a confidence interval from 2.52 to 4.61.

For Interference with Daily Activities, FD patients score an average of 2.80 (SD = 1.51), while OD patients score higher at 3.06 (SD = 2.05), reflecting slightly more interference for OD patients.

In terms of Eating/Drinking, FD patients have a mean score of 2.87 (SD = 1.33), whereas OD patients report a mean of 3.00 (SD = 1.26), suggesting marginally greater impact for OD patients.

For Knowledge & Control, FD patients score an average of 2.56 (SD = 0.94), while OD patients have a mean score of 2.81 (SD = 1.80), indicating slightly better knowledge and control among OD patients.

In the Work/Study domain, both groups show similar scores, with FD patients averaging 2.76 (SD = 1.63) and OD patients 2.75 (SD = 2.05), highlighting comparable impact on work or study activities.

The Total Value scores reveal that FD patients have a mean of 14.74 (SD = 5.22) while OD patients score a mean of 15.19 (SD = 8.31). The confidence intervals indicate that both groups experience significant disability, with OD patients showing more variability in their scores. Overall, while both FD and OD patients report moderate to high levels of disability, OD patients generally exhibit slightly higher scores and greater variability across the SF-NDI domains.

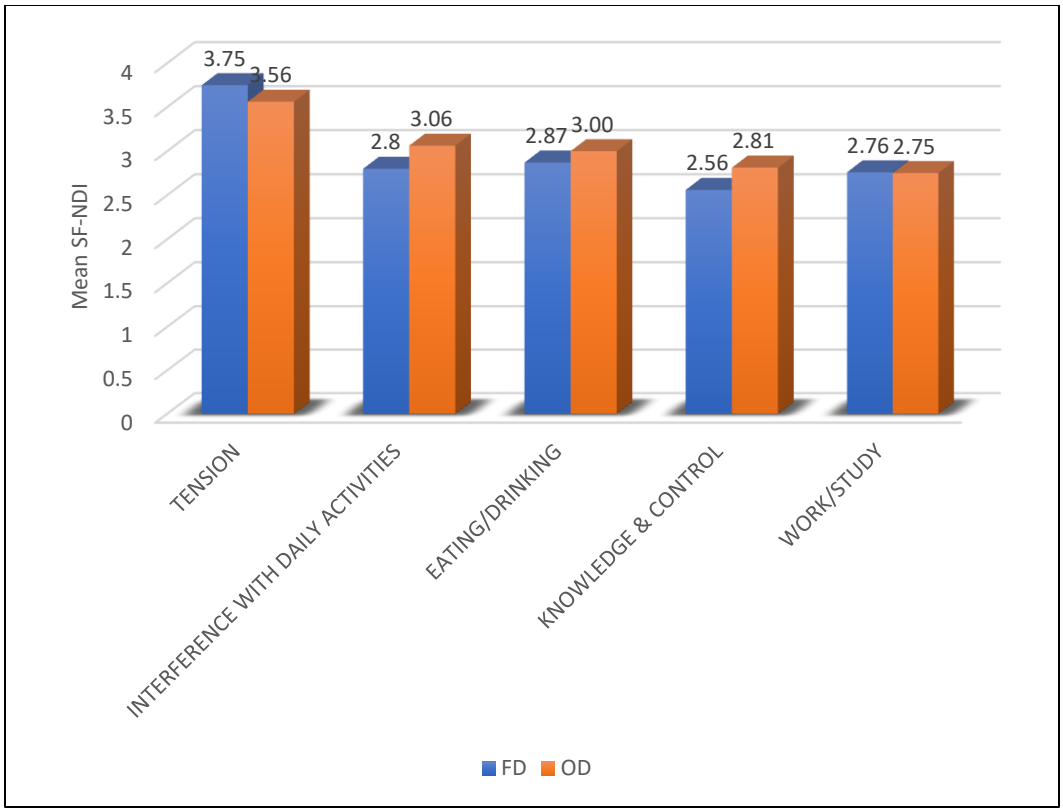


Figure 26- COMPARISON OF DIFFERENT DOMAINS OF QUALITY OF LIFE AMONG DYSPEPSIA PATIENTS

DISCUSSION

The present study was conducted at a tertiary care hospital in North India. An attempt has been made to study the clinical profile, risk factors and quality of life of patients with dyspepsia. The statistical data hence obtained was compared with previously published literature. A total of 100cases with confirmed diagnosis of dyspepsia were included in the study. For comparing health related quality of life, 100 healthy controls were included in the study.

EPIDEMIOLOGY AND DEMOGRAPHICS

Dyspepsia represents a significant global health concern, with prevalence rates varying widely across different populations and geographic regions. Our study, which enrolled 100 patients with dyspepsia, provides valuable insights into the demographic profile of this condition in our local context. The age distribution of dyspepsia patients in our study revealed interesting patterns, with the majority (24%) falling within the 31-40year age group. This finding aligns with some previous studies, such as the Canadian population-based survey that reported peak prevalence of uninvestigated dyspepsia (UD) in the 45-54year age range, and studies from China and Japan showing peak functional dyspepsia (FD) prevalence in the 41-50year and 50-59year age groups, respectively.

However, our results diverge from some European studies that have suggested an inverse relationship between UD prevalence and advancing age. For instance, a Danish survey reported a significantly lower prevalence of UD in adults over 70 years (10%) compared to those under 60 years (18.4%). In contrast, our study found that 22% of patients were over 60 years old, suggesting that dyspepsia remains a significant issue in older adults in our population. This discrepancy highlights the importance of considering regional variations in dyspepsia epidemiology and the need for population-specific research to inform local healthcare strategies.

Gender distribution in our study revealed a notable predominance of females (62%) compared to males (38%) among dyspepsia patients. This finding is consistent with the broader trend observed in functional gastrointestinal disorders and aligns with the meta-analysis by Ford et al., which showed a slightly higher prevalence of UD in women compared to men (25.3% vs 21.9%). The gender disparity in our study appears even more pronounced, suggesting that women in our population may be particularly susceptible to dyspepsia or more likely to seek medical attention for their symptoms.

The systematic review by Lee K et al. further supports this gender difference, demonstrating consistently higher prevalence of FD in women across various iterations of the Rome criteria, with the most marked difference observed using Rome IV criteria (odds ratio for female to male of 2.68, 95% CI 2.31-3.12). These findings underscore the need for gender-specific approaches in dyspepsia management and research, considering potential biological and psychosocial factors that may contribute to this disparity.

RISK FACTORS AND ASSOCIATED CONDITIONS

Our study identified several key factors associated with dyspepsia, providing insights into potential risk factors and comorbidities. Body Mass Index (BMI) analysis revealed that while the majority of patients (55%) fell within the normal BMI range, a significant proportion (37%) were classified as obese. This finding aligns with previous research suggesting a link between lower BMI and functional dyspepsia development. The association between obesity and dyspepsia merits further investigation, as it may involve complex interactions between metabolic factors, gut microbiota, and gastrointestinal motility.

Residential distribution showed a predominance of urban residents (71%) among dyspepsia patients. This urban-rural divide may reflect differences in lifestyle factors, dietary habits, or healthcare-seeking behaviors

between urban and rural populations. It's worth noting that a study conducted in Canada found a higher prevalence of FD among adults of lower socioeconomic status and low level of education, suggesting that urbanization and associated lifestyle changes might contribute to dyspepsia risk.

Comorbidities were prevalent among our dyspepsia patients, with hypertension (13%), diabetes mellitus (10%), and thyroid disease (2%) being the most common. These findings highlight the importance of considering dyspepsia within the broader context of patients' overall health status. The coexistence of these conditions may complicate dyspepsia management and necessitate a more holistic approach to patient care.

Substance use was also examined in our study, revealing that alcohol consumption (10%), smoking (5%), and tobacco chewing (1%) were present among dyspepsia patients. These rates are relatively low compared to some previous studies, such as the meta-analysis by Ford et al., which found smoking to be associated with a higher risk of UD (OR 1.25; 95% CI 1.12 to 1.40). The lower prevalence in our cohort might reflect regional variations in substance use patterns or suggest that other factors may play a more prominent role in dyspepsia development in our population.

Dietary factors, particularly the type of diet, were also investigated. We found that the majority of patients (68%) followed a vegetarian diet. This finding is intriguing, as the role of diet in dyspepsia remains controversial. While some studies have suggested that high-fat foods may induce more dyspeptic symptoms, our results indicate that a vegetarian diet does not necessarily protect against dyspepsia. This underscores the complex relationship between diet and dyspepsia, which likely involves multiple factors beyond simple categorizations of vegetarian versus non-vegetarian diets.

The presence of alarm symptoms was noted in 31% of our patients, with advanced age (>60 years) being the most common alarm feature. This finding supports the current guidelines from the American College of Gastroenterology (ACG) and the Canadian Association of Gastroenterology (CAG) that recommend upper gastrointestinal endoscopy for individuals aged 60 years and above presenting with dyspepsia. However, the relatively high prevalence of alarm symptoms in our cohort, including in younger patients, suggests that a more nuanced approach to endoscopic investigation may be warranted in our population.

CLINICAL PRESENTATION AND SYMPTOM PROFILE

Our study provided a comprehensive analysis of the symptom profile in dyspepsia patients, offering valuable insights into the clinical presentation of this condition. Among the cardinal symptoms of dyspepsia, epigastric burning sensation emerged as the most prevalent complaint. This finding aligns with the classical description of dyspepsia and underscores the centrality of epigastric discomfort in the patient experience.

Interestingly, our results revealed that symptoms beyond the traditional dyspepsia complex were frequently encountered. Belching or burping was identified as the most common associated symptom, followed by bloating and pressure in the upper abdomen. These findings highlight the multifaceted nature of dyspepsia and the overlap with other functional gastrointestinal disorders. The high prevalence of these additional symptoms suggests that a comprehensive approach to symptom assessment is crucial for accurate diagnosis and effective management of dyspepsia.

The intensity of symptoms varied considerably among patients, ranging from minimal to severe. This variability in symptom severity underscores the heterogeneous nature of dyspepsia and the need for individualized approaches to patient care. It also raises questions about the factors that

influence symptom intensity, which may include biological, psychological, and environmental components.

Our analysis of eating patterns revealed that the majority of patients (59%) consumed three meals per day; with a significant proportion (39%) reporting two meals daily. The relationship between meal frequency and dyspepsia symptoms is an area that warrants further investigation, as it may provide insights into potential dietary interventions for symptom management.

Eating speed was also examined, with 47% of patients reporting moderate eating speed, 23% identifying as slow eaters, and 30% as fast eaters. The impact of eating speed on dyspepsia symptoms is not well-established in the literature, and our findings suggest that this factor may play a role in symptom generation or exacerbation for some patients.

The level of physical activity among dyspepsia patients in our study was predominantly sedentary (70%), with only 26% reporting moderate activity and 4% engaging in high levels of physical activity. This high prevalence of sedentary behavior aligns with some previous studies suggesting a link between physical inactivity and functional gastrointestinal disorders. However, the direction of causality remains unclear – whether sedentary behavior contributes to dyspepsia or if dyspeptic symptoms lead to reduced physical activity.

Self-reported food intolerances were noted in our cohort, with many patients reporting milk intolerance and gluten intolerance. While these rates are relatively low, they highlight the potential role of specific food sensitivities in dyspepsia symptoms for some patients. The relationship between perceived food intolerances and objective measures of food sensitivity in dyspepsia patients is an area that merits further research.

DIAGNOSTIC APPROACHES AND FINDINGS

Our study employed various diagnostic approaches to evaluate patients with dyspepsia, providing insights into the underlying pathologies and the utility of different investigative methods. Ultrasound examination of the abdomen was performed in a subset of patients, revealing a range of findings. Notably, 31% of patients who underwent ultrasound showed no sonographic abnormalities, while 21% were found to have fatty liver. Other less common findings included cholelithiasis (4%), enlarged prostate (2%), and various renal abnormalities.

These ultrasound results highlight the importance of considering extra-gastric pathologies in the evaluation of dyspepsia patients. The relatively high prevalence of fatty liver in our cohort is particularly noteworthy, as it suggests a potential link between metabolic factors and dyspeptic symptoms. This finding aligns with the growing body of evidence indicating complex interactions between gastrointestinal symptoms and metabolic disorders.

Upper gastrointestinal endoscopy was performed in a subset of patients, yielding valuable diagnostic information. Among those who underwent endoscopy, normal UGIE finding was the most common finding,consistent with a diagnosis of functional dyspepsia, followed by celiac disease and peptic ulcer disease.

The endoscopic findings in our study underscore the heterogeneity of underlying pathologies in dyspepsia patients. The presence of organic causes such as gastritis and peptic ulcer disease in a significant proportion of patients highlights the importance of endoscopic evaluation in distinguishing between functional and organic dyspepsia. The identification of celiac disease in 4% of patients undergoing UGIE is particularly significant, as it represents a treatable cause of dyspepsia that might be missed without appropriate investigation.

Our endoscopic findings can be compared to those reported by Kumari P et al. in their study of dyspepsia patients with alarm symptoms. In their cohort, 34.7% of patients had normal endoscopic findings indicative of functional dyspepsia, while 65.3% showed abnormal findings categorized as organic dyspepsia. The higher rate of abnormal findings in their study likely reflects the focus on patients with alarm symptoms, emphasizing the importance of these clinical indicators in predicting underlying pathology.

The diagnostic approach in our study aligns with current guidelines, including those from the American College of Gastroenterology (ACG) and the Canadian Association of Gastroenterology (CAG), which recommend endoscopic evaluation for patients aged 60 years and above or those with alarm symptoms. However, our findings suggest that even in younger patients without alarm symptoms, endoscopy may reveal significant pathologies. This raises questions about the optimal threshold for endoscopic investigation in different populations and highlights the need for population-specific guidelines.

QUALITY OF LIFE IMPACT

Our study utilized the Short-Form Nepean Dyspepsia Index (SF-NDI) to assess the impact of dyspepsia on patients' health-related quality of life (HR QoL). The results revealed significant impairments across various domains, with a mean total SF-NDI score of 14.81. This finding underscores the substantial burden that dyspepsia places on patients' overall well-being and daily functioning.

Analysis of the SF-NDI subdomains provided nuanced insights into the specific areas of life most affected by dyspepsia. The tension domain emerged as the most severely impacted, with a mean score of 3.72. This finding highlights the significant psychological toll of dyspepsia, suggesting that anxiety and stress are prominent features of the patient experience. The high score in this domain aligns with previous research indicating a

strong bidirectional relationship between psychological factors and gastrointestinal symptoms in functional disorders.

Interference with daily activities was also notably affected, with a mean score of 2.84. This result emphasizes the practical implications of dyspepsia on patients' everyday lives, potentially limiting their ability to engage in work, social activities, and personal care. The impact on eating and drinking habits was similarly substantial, with a mean score of 2.89, reflecting the central role of food-related concerns in the dyspepsia experience.

Interestingly, the knowledge and control domain had the lowest mean score (2.60), suggesting that patients felt relatively more confident in their understanding and management of their condition compared to other aspects of their quality of life. This finding may reflect the effectiveness of patient education efforts or could indicate an area for potential improvement in dyspepsia care.

Our HR QoL findings can be compared to those reported by Egbo O et al. in their cross-sectional study of 324 dyspepsia patients. They found that 92.6% of participants exhibited significantly diminished HR QoL, with a mean SF-NDI score of 31.3 ± 9.1. While the scoring systems may not be directly comparable, both studies highlight the profound impact of dyspepsia on quality of life. Egbo O et al. also noted that interference with daily activities and eating/drinking were the most impaired subdomains, aligning closely with our findings.

The substantial impact on quality of life observed in our study underscores the importance of addressing not only the physical symptoms of dyspepsia but also its broader effects on patients' psychological well-being and daily functioning. This holistic approach to dyspepsia management aligns with the biopsychosocial model of functional gastrointestinal disorders and suggests that interventions targeting quality of life improvements should be an integral part of dyspepsia care.

Moreover, the significant impairments in quality of life observed in our study population highlight the economic and societal implications of dyspepsia. Previous research has estimated the annual cost to society at around £1 billion, and a Malaysian study reported costs of 14,816 USD per 1,000 individuals in rural areas and 59,282 USD per 1,000 individuals in urban regions. While our study did not directly assess economic impacts, the substantial quality of life impairments observed suggest that the economic burden of dyspepsia in our population may be considerable and warrants further investigation.

IMPLICATIONS OF COVID-19 PANDEMIC

The COVID-19 pandemic has had far-reaching effects on global health, including potential impacts on functional gastrointestinal disorders such as dyspepsia. Our study, conducted during the pandemic period, provides valuable insights into the prevalence and characteristics of dyspepsia in this unique context. While our study design did not specifically assess the impact of COVID-19 on dyspepsia, the data collected during this period may reflect some of the pandemic's indirect effects on gastrointestinal health.

The meta-analysis by Marasco G et al. investigating the incidence of post-COVID-19 functional dyspepsia (FD) and irritable bowel syndrome (IBS) provides an important context for our findings. Their analysis revealed that COVID-19 survivors had an elevated risk of developing IBS compared to controls, with a pooled odds ratio of 12.92 (95% CI: 3.58-46.60) in prospective cohort studies. While definitive data for FD were not available, the increased risk of IBS suggests that the pandemic may have broader implications for functional gastrointestinal disorders, potentially including dyspepsia.

Our study found that 2% of the dyspepsia patients had a history of COVID-19 infection. While this percentage is relatively low, it is important to consider that the full impact of COVID-19 on gastrointestinal health may

not yet be apparent, given the potential for post-infectious functional disorders to develop over time. The long-term follow-up of these patients will be crucial to understand any potential associations between COVID-19 and the development or exacerbation of dyspepsia symptoms.

The high rate of COVID-19 vaccination in our cohort (95% of patients) is noteworthy. While our study was not designed to assess the impact of vaccination on dyspepsia symptoms, this high vaccination rate provides important contextual information about our study population and may have implications for the overall health status and healthcare-seeking behaviors of these patients.

LIMITATIONS

1. Small sample size, single centered-study.
2. Patients less than 18 years of age and greater than 75 years of age were not included.

SUMMARY AND CONCLUSION

SUMMARY

1) The highest number of functional dyspepsia (FD) patients was over 60 years old, while organic dyspepsia (OD) was more common in the 31-40 age group. FD groupconsisting of 84 participants, the mean age is 47.01 years, while the OD group, with 16 participants, has a mean age of 41.38 years.
2) Females were more prevalent in both FD and OD groups compared to controls.In rural areas, consisting of 29 participants in total, there are 16 females and 13 males. Conversely, in urban areas, which encompass 71 participants, there are 46 females and 25 males. In nutshell, there is female preponderance in both settings.70% of FD patients and 75% of OD patients resided in urban areas, suggesting a higher prevalence of dyspepsia in urban settings.
3) FD was more prevalent among those with lower education levels, while OD was more common among graduates. Housewives represented the largest group with FD (44%) and had a notable presence with OD (38%).
4) Age >60 years was the most common alarm symptom, followed by a history of NSAID intake, particularly in FD patients.
5) Epigastric burning was the most common symptom in both FD and OD patients, followed by epigastric pain/ache, burping/belching, and bloating.
6) Among medications intake history, PPI was the most common medication used followed by central modulator, then prokinetic and H2RA was the least used one.
7) Among dyspeptic patients, majority of the patients didn’t reveal any sonographic abnormality (31%), followed by fatty liver in 21 % of the patients.
8) Diet and Eating Habits: A higher proportion of OD patients (44%) consumed a non-vegetarian diet compared to FD patients (30%). FD

and OD patients were more likely to have 2 meals per day compared to controls.

9) Eating Speed: FD patients had a higher proportion of fast eaters (31%) compared to controls (11%), while OD patients' eating speeds were more evenly distributed.
10) Physical Activity: Both FD and OD groups showed higher rates of sedentary lifestyle compared to controls.
11) Food Intolerances: Self-reported gluten intolerance was significantly more common among OD patients (19%) compared to FD patients (0%) and controls (1%). Intolerance to spices and oily foods was significantly higher in dyspepsia patients compared to controls.
12) The odds ratios in study findings provide insight into the potential strength of association between addictive behaviors and dyspepsia (especially for alcohol; OR 2.67), but none of the associations observed in this study reached statistical significance for alcohol, smoking, tobacco chewing and opioid abuse.
13) Quality of Life (SF-NDI): Both FD and OD patients reported moderate to high levels of disability across various domains, with OD patients generally showing slightly higher scores and greater variability. Organic causes of dyspepsia have higher mean SF-NDI values than functional one, signifying more impact on quality of life.
14) Tension and Daily Activities: FD patients reported slightly higher levels of tension, while OD patients reported more interference with daily activities.
15) Among five different domains of SF-NDI questionnaire, health related quality of life was most affected in tension domain (with mean SF-NDI of 3.75) and least in knowledge/control domain (with mean SF-NDI of 2.56) for functional dyspepsia patients.

CONCLUSION

This comprehensive study on dyspepsia provides valuable insights into the clinical profiles, risk factors, and quality of life impacts of both functional dyspepsia (FD) and organic dyspepsia (OD). The findings reveal distinct age and gender distributions, with FD predominating in older individuals and OD more common in younger adults, both showing a female preponderance. Urban residence emerged as a significant factor in dyspepsia prevalence, potentially reflecting lifestyle and environmental influences. Educational background and occupation, particularly being a housewife, were identified as notable factors in dyspepsia occurrence. The study underscores the importance of recognizing alarm symptoms, especially in older patients and those with NSAID use history. Symptomatically, epigastric discomfort was paramount across both FD and OD groups. Dietary habits, eating speeds, and physical activity levels were found to differ significantly between dyspeptic patients and controls, suggesting potential areas for lifestyle interventions. The higher prevalence of food intolerances, particularly to spices and oily foods, in dyspeptic patients highlights the need for dietary considerations in management strategies. While addictive behaviors showed some association with dyspepsia, these findings were not statistically significant. Importantly, the study demonstrates the substantial impact of dyspepsia on quality of life, with both FD and OD patients reporting moderate to high levels of disability across various domains. The nuanced differences in quality-of-life impacts between FD and OD patients, particularly in tension levels and interference with daily activities, emphasize the need for tailored management approaches. These findings collectively contribute to a more nuanced understanding of dyspepsia, its risk factors, and its impacts on patients' lives, potentially guiding more effective diagnostic and therapeutic strategies in clinical practice.

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S NO.	MRD NO	DEMOGRAPHICS									CO	
		AGE	GENDER	WEIGHT	HEIGHT	BMI	QUALIFICATION	OCCUPATION	ADDRESS	CONTACT	DIABETES MELLITUS	HYPERTENSION
1	1287275	62	F	51	1.58	20.42941836	4	HOUSEWIFE	LUDHIANA-URBAN	8148806223	N	N
2	1472942	32	M	87	1.73	29.06879615	GRADUATE	BUSINESS	PATHANKOT-URBAN	9988111622	N	N
3	1390934	65	F	76	1.64	28.25698989	2	HOUSEWIFE	BATHINDA -RURAL	9569192263	N	N
4	1292251	25	M	49	1.65	17.99816345	10	LABOUR	LUDHIANA-URBAN	6294625915	N	N
5	561979	59	M	77	1.8	23.7654321	10	BUSINESS	MOGA- RURAL	9872701396	N	N
6	1346381	38	M	96	1.7	33.21799308	0	FARMER	SANGRUR RURAL	9855960750	N	N
7	1354222	62	F	57.2	1.58	22.91299471	8	HOUSEWIFE	LUDHIANA-RURAL	9463040975	N	Y
8	1472867	44	M	57	1.75	18.6122449	12	FARMER	MUKHTSAR -RURAL	9437020249	N	N
9	269297	68	M	52	1.63	19.57168128	5	BUSINESS	HAMIRPUR URBAN	9471610418	N	Y
10	1342277	29	M	46	1.65	16.89623508	GRADUATE	STUDENT	LUDHIANA- URBAN	6283111796	N	N
11	1461139	36	M	76	1.63	28.60476495	GRADUATE	BUSINESS	HAMIRPUR URBAN	9857848764	N	N
12	1452674	58	F	73	1.58	29.24210864	5	HOUSEWIFE	HAMIRPUR URBAN	9417610418	N	N
13	1417848	65	M	65	1.64	24.1671624	3	FARMER	MOGA- RURAL	9876118112	N	N
14	1353632	59	M	58	1.7	20.06920415	8	BUSINESS	PATHANKOT-RURAL	8427597858	Y	N
15	1377178	36	F	60	1.64	22.30814991	8	HOUSEWIFE	LUDHIANA URBAN	9872043836	N	N
16	667060	73	F	86	1.7	29.75778547	0	HOUSEWIFE	BALACHAUR URBAN	8847370298	N	N
17	1023406	65	M	65	1.73	21.71806609	5	BUSINESS	JAMMU URBAN	9906013777	N	N
18	1375519	74	F	78	1.55	32.46618106	5	HOUSEWIFE	MANSA URBAN	9501598417	N	Y
19	1406777	58	F	58	1.52	25.10387812	10	HOUSEWIFE	LUDHIANA URBAN	9781293328	N	N
20	1311298	52	F	57	1.61	21.98989237	0	HOUSEWIFE	LUDHIANA URBAN	7888871159	Y	Y
21	1295126	36	F	57	1.7	19.72318339	GRADUATE	HOUSEWIFE	HOSHIARPUR RURAL	9417671282	N	N
22	1468546	45	F	57.3	1.67	20.54573488	5	HOUSEWIFE	GURDASPUR URBAN	7529896959	N	N
23	97555	60	M	79	1.64	29.37239738	10	GOVT JOB RETIRED	PHAGWARA URBAN	8146288855	N	N
24	1396380	32	F	67.8	1.7	23.46020761	12	HOUSEWIFE	SANGRUR RURAL	9618330001	N	N
25	652001	47	M	67	1.67	24.02380867	GRADUATE	PVT JOB	LUDHIANA URBAN	9463635299	N	N
26	898102	56	F	65	1.58	26.03749399	10	HOUSEWIFE	HOSHIARPUR RURAL	9779691789	N	N
27	1477269	48	F	63	1.64	23.42355741	10	HOUSEWIFE	BARNALA RURAL	9478403258	N	N
28	1477298	30	F	65	1.64	24.1671624	12	HOUSEWIFE	LUDHIANA URBAN	9914670358	N	N
29	1474741	27	F	55.5	1.55	23.10093652	POST GRADUATE	HOUSEWIFE	KANGRA RURAL	9882800197	N	N
30	1278081	65	F	95	1.7	32.87197232	11	HOUSEWIFE	FEROZPUR RURAL	9463802858	Y	Y
31	539872	69	F	70	1.58	28.04037814	5	HOUSEWIFE	SANGRUR URBAN	9501040294	N	N
32	1519298	48	F	71	1.7	24.56747405	8	BUSINESS	LUDHIANA URBAN	9070620292	N	N
33	1097189	62	M	66	1.76	21.30681818	12	BUSINESS	PHILLAUR URBAN	7814330450	N	N
34	174062	34	M	50	1.7	17.30103806	12	BUSINESS	LUDHIANA URBAN	6280715787	N	N
35	1531938	48	M	65	1.71	22.22906193	5	FARMER	HOSHIARPUR URBAN	9463305668	N	N
36	300867	59	F	51	1.76	16.4643595	5	PVT JOB	PHILLAUR URBAN	8146093222	N	N
37	1547598	35	F	55	1.55	22.89281998	GRADUATE	PVT JOB	FATEHGARH SAHIB URBAN	784991825	N	N
38	755841	32	M	68	1.73	22.72043837	10	PVT JOB	SAHEED BHAGAT SINGH NAGAR URBAN	9855251590	N	N
39	845371	43	F	67	1.58	26.83864765	12	HOUSEWIFE	LUDHIANA URBAN	9855255043	Y	Y
40	91284	61	M	93	1.73	31.07354071	10	FARMER	MOGA RURAL	9463174479	N	Y

S NO.	MRD NO	MORBIDITIES				SUBSTANCE ABUSE					DIET AND ACTIVITIY										
											TYPE		MEALS PER DAY						EATING SPEED		
		CAD	CKD	THYROID DS	OTHER	ALCOHOL	SMOKING	TOBACCO CHEWING	OPOIDS	OTHER	VEG	NON VEG	1	2	3	4	5	6	SLOW	MODERATE	FAST
1	1287275	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
2	1472942	N	N	N	N	Y	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
3	1390934	N	N	Y	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
4	1292251	N	N	N	N	N	Y	Y	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
5	561979	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
6	1346381	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N	N	N	Y	N
7	1354222	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
8	1472867	N	N	N	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N	N	N	N	Y
9	269297	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
10	1342277	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
11	1461139	N	N	N	N	Y	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
12	1452674	N	N	N	DYSLIPIDEMIA	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
13	1417848	N	N	N	N	Y	N	N	N	N	N	Y	N	Y	N	N	N	N	N	N	Y
14	1353632	N	N	N	N	N	Y	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
15	1377178	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	Y	N	N
16	667060	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
17	1023406	N	N	N	N	Y	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
18	1375519	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N	N
19	1406777	N	N	N	RA/HEP C	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
20	1311298	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
21	1295126	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N	N
22	1468546	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
23	97555	N	N	N	DEPRESSION	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
24	1396380	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
25	652001	N	N	N	EPILEPSY	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
26	898102	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
27	1477269	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
28	1477298	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
29	1474741	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
30	1278081	N	N	N	OSTEOPOROSIS	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
31	539872	N	N	Y	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
32	1519298	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
33	1097189	N	N	N	N	Y	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
34	174062	N	N	NN	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
35	1531938	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
36	300867	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
37	1547598	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
38	755841	N	N	N	N	Y	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
39	845371	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
40	91284	N	N	N	N	Y	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N

S NO.	MRD NO	LEVEL OF ACTIVITY			ALARM SYMPTOMS					
		SEDENTARY	MODERATE	HARD	AGE >60	ANEMIA	GI BLEED	PROGESSIVE DYSPHAGIA	PERSISTENT VOMITING	UNINTENTIONAL WEIGHT LOSS
1	1287275	N	Y	N	Y	N	N	N	N	N
2	1472942	Y	N	N	N	N	N	N	N	N
3	1390934	Y	N	N	Y	N	N	Y	N	N
4	1292251	N	N	Y	N	N	N	N	N	N
5	561979	Y	N	N	N	N	N	N	N	Y
6	1346381	N	Y	N	N	N	N	N	N	N
7	1354222	N	Y	N	Y	N	N	N	N	N
8	1472867	Y	N	N	N	N	N	N	N	N
9	269297	Y	N	N	Y	N	N	N	N	N
10	1342277	N	N	Y	N	N	N	N	N	N
11	1461139	N	Y	N	N	N	N	N	N	N
12	1452674	Y	N	N	N	N	N	N	N	N
13	1417848	N	Y	N	Y	N	N	N	N	N
14	1353632	Y	N	N	N	N	N	N	N	N
15	1377178	N	Y	N	N	N	Y	N	N	N
16	667060	Y	N	N	Y	N	N	N	N	N
17	1023406	Y	N	N	Y	N	N	N	N	N
18	1375519	Y	N	N	Y	N	N	N	N	N
19	1406777	Y	N	N	N	N	N	N	N	N
20	1311298	Y	N	N	N	N	Y	N	N	N
21	1295126	N	Y	N	N	N	N	N	N	N
22	1468546	Y	N	N	N	Y	N	N	N	N
23	97555	Y	N	N	N	N	N	N	N	N
24	1396380	Y	N	N	N	N	Y	N	N	N
25	652001	N	Y	N	N	N	N	N	N	N
26	898102	Y	N	N	N	N	N	N	N	N
27	1477269	N	Y	N	N	N	N	N	N	N
28	1477298	Y	N	N	N	N	N	N	N	N
29	1474741	Y	N	N	N	N	N	N	N	N
30	1278081	Y	N	N	Y	N	N	N	N	N
31	539872	Y	N	N	Y	N	N	N	N	N
32	1519298	Y	N	N	N	N	N	N	N	N
33	1097189	Y	N	N	Y	N	N	N	N	N
34	174062	Y	N	N	N	N	N	N	N	N
35	1531938	N	Y	N	N	N	N	N	N	N
36	300867	Y	N	N	N	N	N	N	N	N
37	1547598	N	Y	N	N	N	N	N	N	N
38	755841	Y	N	N	N	N	N	N	N	N
39	845371	N	Y	N	N	N	N	N	N	N
40	91284	Y	N	N	Y	N	N	N	N	N

S NO.	MRD NO	FAMILY HISTORY OF MALIGNANCY/PALPABLE LUMP	HISTORY OF NSAID INTAKE	SELF REPORTED INTOLERANCE		SELF REPORTED FOOD INTOLERANCE	EPIGASTRIC PA	
				GLUTEN	MILK		FREQUENCY	INTENSITY
1	1287275	N	N	N	N	SPICES	0	0
2	1472942	N	N	N	N	N	0	0
3	1390934	N	N	N	N	N	2	3
4	1292251	N	N	N	N	SPICES, CHICKEN	1	1
5	561979	N	N	N	N	SPICES, FRUITS	4	3
6	1346381	N	Y	N	N	SPICES	1	1
7	1354222	N	N	N	N	PAPAYA	0	0
8	1472867	N	N	N	N	N	0	0
9	269297	N	N	N	N	N	2	1
10	1342277	N	N	N	Y	SPICES, OILY FOOD	1	1
11	1461139	N	N	N	N	N	0	0
12	1452674	N	N	N	N	SPICES, OILY FOOD, CORN	0	0
13	1417848	N	N	N	N	SPICES, PICKLE	2	1
14	1353632	N	N	N	N	N	2	1
15	1377178	N	N	N	Y	N	0	0
16	667060	N	N	N	N	N	1	1
17	1023406	N	N	N	N	N	2	1
18	1375519	N	N	N	N	N	4	4
19	1406777	N	Y	N	N	N	0	0
20	1311298	N	N	N	Y	N	1	1
21	1295126	N	N	N	N	CHICKPEA, RED BEANS	0	0
22	1468546	N	N	N	N	OILY FOOD	0	0
23	97555	N	N	N	N	N	1	1
24	1396380	N	Y	N	N	N	2	2
25	652001	N	N	N	N	N	0	0
26	898102	N	N	N	N	N	0	0
27	1477269	N	N	N	N	N	1	1
28	1477298	N	Y	N	N	SPICES, TEA, OILY FOOD	0	0
29	1474741	N	N	N	N	SPICES, TEA	1	1
30	1278081	N	Y	N	N	SPICES, OILY FOOD, CURD	1	1
31	539872	N	N	N	N	SPICES, OILY FOOD	0	0
32	1519298	N	N	N	Y	N	1	1
33	1097189	N	N	N	N	N	0	0
34	174062	N	N	N	N	N	2	3
35	1531938	N	N	N	N	N	1	2
36	300867	N	N	N	N	SPICES, CURD	0	0
37	1547598	N	N	N	N	N	0	0
38	755841	N	N	N	N	SPICES, OILY	0	0
39	845371	N	Y	N	N	SPICES, OILY	0	0
40	91284	N	N	N	N	N	0	0

S NO.	MRD NO	CARDINAL SYMPTOMS										
		AIN/ACHE	EPIGASTRIC BURNING			EARLY SATIETY			POST PRANDIAL FULLNESS			
		BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY
1	1287275	0	2	3	2	0	0	0	0	0	0	0
2	1472942	0	0	0	0	0	0	0	0	0	0	4
3	1390934	2	4	2	2	0	0	0	0	0	0	0
4	1292251	1	4	3	3	0	0	0	0	0	0	0
5	561979	3	4	4	3	0	0	0	0	0	0	4
6	1346381	1	2	1	1	0	0	0	0	0	0	4
7	1354222	0	0	0	0	0	0	0	0	0	0	2
8	1472867	0	1	1	2	0	0	0	0	0	0	0
9	269297	1	0	0	0	0	0	0	0	0	0	0
10	1342277	1	1	1	1	0	0	0	0	0	0	0
11	1461139	0	1	1	1	0	0	0	0	0	0	2
12	1452674	0	1	1	1	0	0	0	0	0	0	0
13	1417848	1	0	0	0	0	0	0	0	0	0	2
14	1353632	1	4	2	2	0	0	0	0	0	0	0
15	1377178	0	2	2	2	0	0	0	0	0	0	0
16	667060	1	0	0	0	0	0	0	0	0	0	2
17	1023406	1	0	0	0	0	0	0	0	0	0	0
18	1375519	4	0	0	0	0	0	0	0	0	0	0
19	1406777	0	1	1	1	1	1	1	0	0	0	0
20	1311298	1	0	0	0	0	0	0	0	0	0	0
21	1295126	0	2	2	2	0	0	0	0	0	0	0
22	1468546	0	0	0	0	2	2	2	1	1	1	0
23	97555	1	1	1	1	0	0	0	0	0	0	0
24	1396380	2	0	0	0	0	0	0	0	0	0	0
25	652001	0	0	0	0	2	2	2	2	2	2	0
26	898102	0	0	0	0	2	2	2	0	0	0	0
27	1477269	1	0	0	0	0	0	0	0	0	0	1
28	1477298	0	1	1	1	0	0	0	1	1	1	0
29	1474741	1	1	1	1	1	1	1	0	0	0	1
30	1278081	1	0	0	0	0	0	0	0	0	0	1
31	539872	0	4	3	3	0	0	0	0	0	0	1
32	1519298	1	0	0	0	0	0	0	0	0	0	0
33	1097189	0	1	1	1	0	0	0	0	0	0	2
34	174062	3	0	0	0	0	0	0	0	0	0	2
35	1531938	2	1	1	1	0	0	0	0	0	0	2
36	300867	0	1	1	1	0	0	0	0	0	0	0
37	1547598	0	1	1	1	0	0	0	0	0	0	0
38	755841	0	1	1	1	0	0	0	0	0	0	0
39	845371	0	1	1	1	0	0	0	0	0	0	0
40	91284	0	0	0	0	0	0	0	1	1	1	0

S NO.	MRD NO	SYMP									
		UPPER ABDOMEN DISCOMFORT		BURNING SENSATION IN CHEST			UPPER ABDOMEN CRAMPS			PAIN /ACHE IN CHEST	
		INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY
1	1287275	0	0	0	0	0	0	0	0	0	0
2	1472942	1	1	0	0	0	0	0	0	0	0
3	1390934	0	0	0	0	0	0	0	0	0	0
4	1292251	0	0	0	0	0	0	0	0	0	0
5	561979	2	3	0	0	0	0	0	0	0	0
6	1346381	4	4	0	0	0	0	0	0	1	1
7	1354222	1	1	0	0	0	0	0	0	0	0
8	1472867	0	0	0	0	0	0	0	0	0	0
9	269297	0	0	0	0	0	0	0	0	0	0
10	1342277	0	0	0	0	0	0	0	0	0	0
11	1461139	1	1	0	0	0	0	0	0	0	0
12	1452674	0	0	0	0	0	0	0	0	0	0
13	1417848	1	1	0	0	0	0	0	0	0	0
14	1353632	0	0	0	0	0	0	0	0	0	0
15	1377178	0	0	0	0	0	0	0	0	0	0
16	667060	0	0	0	0	0	0	0	0	0	0
17	1023406	0	0	2	1	1	0	0	0	0	0
18	1375519	0	0	0	0	0	0	0	0	0	0
19	1406777	0	0	0	0	0	0	0	0	0	0
20	1311298	0	0	0	0	0	0	0	0	0	0
21	1295126	0	0	0	0	0	0	0	0	0	0
22	1468546	0	0	0	0	0	0	0	0	0	0
23	97555	0	0	0	0	0	0	0	0	0	0
24	1396380	0	0	0	0	0	0	0	0	0	0
25	652001	0	0	0	0	0	0	0	0	0	0
26	898102	0	0	0	0	0	0	0	0	0	0
27	1477269	1	1	0	0	0	0	0	0	0	0
28	1477298	0	0	1	1	1	0	0	0	0	0
29	1474741	1	1	1	1	1	0	0	0	0	0
30	1278081	1	1	0	0	0	0	0	0	0	0
31	539872	2	2	0	0	0	0	0	0	0	0
32	1519298	0	0	1	1	1	0	0	0	0	0
33	1097189	2	2	0	0	0	0	0	0	0	0
34	174062	2	2	0	0	0	0	0	0	0	0
35	1531938	2	2	0	0	0	0	0	0	0	0
36	300867	0	0	0	0	0	0	0	0	0	0
37	1547598	0	0	0	0	0	0	0	0	0	0
38	755841	0	0	1	1	1	0	0	0	0	0
39	845371	0	0	0	0	0	0	0	0	0	0
40	91284	0	0	0	0	0	0	0	0	0	0

CLINICAL HISTORY

'TOMS

S NO.	MRD NO	OTHERS										
			BITTER/SOUR TASTING FLUID IN THROAT/MOUTH			BLOATING/PRESSURE IN UPPER ABDOMEN			NAUSEA			
		BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUIENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY
1	1287275	0	1	1	1	1	1	1	4	4	4	0
2	1472942	0	0	0	0	0	0	0	0	0	0	0
3	1390934	0	0	0	0	0	0	0	0	0	0	0
4	1292251	0	0	0	0	0	0	0	0	0	0	2
5	561979	0	1	1	1	0	0	0	0	0	0	3
6	1346381	1	0	0	0	4	3	3	1	1	1	0
7	1354222	0	2	2	2	0	0	0	0	0	0	0
8	1472867	0	1	1	1	0	0	0	0	0	0	0
9	269297	0	2	1	1	0	0	0	0	0	0	0
10	1342277	0	0	0	0	0	0	0	0	0	0	0
11	1461139	0	0	0	0	1	1	1	0	0	0	1
12	1452674	0	0	0	0	0	0	0	0	0	0	2
13	1417848	0	0	0	0	0	0	0	0	0	0	1
14	1353632	0	0	0	0	0	0	0	0	0	0	0
15	1377178	0	0	0	0	0	0	0	2	1	1	4
16	667060	0	1	1	1	0	0	0	0	0	0	0
17	1023406	0	0	0	0	1	1	1	1	1	1	1
18	1375519	0	2	1	1	0	0	0	0	0	0	2
19	1406777	0	0	0	0	0	0	0	0	0	0	0
20	1311298	0	0	0	0	2	1	1	0	0	0	2
21	1295126	0	0	0	0	3	2	2	0	0	0	0
22	1468546	0	0	0	0	0	0	0	0	0	0	0
23	97555	0	0	0	0	0	0	0	0	0	0	3
24	1396380	0	0	0	0	2	2	2	0	0	0	0
25	652001	0	0	0	0	0	0	0	0	0	0	0
26	898102	0	0	0	0	0	0	0	0	0	0	2
27	1477269	0	0	0	0	1	1	1	0	0	0	0
28	1477298	0	0	0	0	1	1	1	0	0	0	2
29	1474741	0	0	0	0	0	0	0	0	0	0	0
30	1278081	0	4	3	3	0	0	0	0	0	0	0
31	539872	0	0	0	0	0	0	0	0	0	0	0
32	1519298	0	0	0	0	0	0	0	1	1	1	0
33	1097189	0	0	0	0	0	0	0	0	0	0	1
34	174062	0	0	0	0	2	2	2	0	0	0	1
35	1531938	0	0	0	0	1	1	1	0	0	0	1
36	300867	0	0	0	0	1	1	1	0	0	0	2
37	1547598	0	0	0	0	2	2	2	1	1	1	1
38	755841	0	0	0	0	0	0	0	1	1	1	2
39	845371	0	0	0	0	0	0	0	0	0	0	1
40	91284	0	0	0	0	2	2	2	0	0	0	0

S NO.	MRD NO									DURATION	
		BURPING/BELCHING		VOMITING			BAD BREATH			WEEKS	MONTHS
		INTENSITY	BOTHERSOMENESS	FREQEUNCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS		
1	1287275	0	0	0	0	0	0	0	0	-	-
2	1472942	0	0	0	0	0	0	0	0	-	8
3	1390934	0	0	0	0	0	0	0	0	-	-
4	1292251	1	1	0	0	0	0	0	0	-	10
5	561979	2	2	0	0	0	0	0	0	-	-
6	1346381	0	0	0	0	0	0	0	0	-	-
7	1354222	0	0	0	0	0	0	0	0	-	7
8	1472867	0	0	0	0	0	0	0	0	-	-
9	269297	0	0	0	0	0	0	0	0	-	-
10	1342277	0	0	0	0	0	0	0	0	-	-
11	1461139	1	1	0	0	0	0	0	0	-	7
12	1452674	1	1	0	0	0	0	0	0	-	6
13	1417848	1	1	0	0	0	0	0	0	-	8
14	1353632	0	0	0	0	0	0	0	0	-	-
15	1377178	3	2	0	0	0	0	0	0	-	-
16	667060	0	0	0	0	0	0	0	0	-	-
17	1023406	1	1	0	0	0	0	0	0	-	-
18	1375519	2	2	0	0	0	0	0	0	-	-
19	1406777	0	0	0	0	0	0	0	0	-	-
20	1311298	1	1	0	0	0	0	0	0	-	7
21	1295126	0	0	0	0	0	0	0	0	-	-
22	1468546	0	0	0	0	0	0	0	0	-	-
23	97555	2	2	0	0	0	0	0	0	-	-
24	1396380	0	0	0	0	0	0	0	0	-	-
25	652001	0	0	0	0	0	0	0	0	-	-
26	898102	2	2	0	0	0	0	0	0	-	-
27	1477269	0	0	0	0	0	0	0	0	-	-
28	1477298	2	2	0	0	0	0	0	0	-	-
29	1474741	0	0	0	0	0	0	0	0	-	-
30	1278081	0	0	0	0	0	0	0	0	-	6
31	539872	0	0	0	0	0	0	0	0	-	-
32	1519298	0	0	0	0	0	1	1	1	-	-
33	1097189	2	2	0	0	0	0	0	0	-	-
34	174062	1	1	0	0	0	0	0	0	-	-
35	1531938	1	1	0	0	0	0	0	0	-	-
36	300867	2	2	0	0	0	0	0	0	-	-
37	1547598	1	1	0	0	0	0	0	0	-	-
38	755841	2	2	0	0	0	0	0	0	-	6
39	845371	1	1	0	0	0	1	1	1	-	6
40	91284	0	0	1	1	1	0	0	0	-	-

S NO.	MRD NO		MEDICATIONS INTAKE				
		YEARS	PPI	H2RA	PROKINETICS	CENTRAL NEUROMODULATOR	OTHERS
1	1287275	2	Y	N	Y	N	LACTITOL,ISPHAGUL
2	1472942	-	Y	N	N	N	N
3	1390934	1	Y	N	N	Y	THYROXINE,ATORVASTATIN
4	1292251	-	Y	Y	N	N	LACTITOL
5	561979	7	Y	N	N	N	LACTITOL
6	1346381	2.5	Y	N	N	N	NSAID
7	1354222	-	N	Y	N	N	N
8	1472867	1	Y	N	N	N	N
9	269297	1	N	N	N	Y	ATORVASTATIN
10	1342277	7	Y	N	N	Y	N
11	1461139	-	Y	N	N	N	LACTITOL
12	1452674	-	Y	N	N	N	ATORVASTATIN, FENOFIBRATE
13	1417848	-	Y	N	N	N	PROBIOTIC, MAGNESIUM HYDROXIDE,OXETACAINE
14	1353632	1.5	Y	N	N	N	N
15	1377178	11	Y	N	N	Y	N
16	667060	10	Y	N	N	Y	PROBIOTIC,SAROGLITAZAR
17	1023406	2.5	Y	N	Y	Y	N
18	1375519	4	Y	N	N	Y	TELMISARTAN, ATORVASTATIN.FENOFIBRATE
19	1406777	5	Y	N	N	Y	MTX,ETORICOXIB
20	1311298	-	Y	N	N	N	LACTITOL
21	1295126	8	Y	N	N	Y	N
22	1468546	1	Y	N	Y	Y	MULTIVITAMIN
23	97555	4	Y	N	N	Y	N
24	1396380	4	Y	N	N	N	NSAID
25	652001	3	Y	N	N	Y	N
26	898102	6	N	Y	N	N	N
27	1477269	4	Y	N	N	Y	PROBIOTIC
28	1477298	3	Y	N	N	N	NSAID
29	1474741	1	Y	N	N	N	N
30	1278081	-	Y	N	N	Y	NSAID
31	539872	5	Y	N	Y	N	THYROXINE
32	1519298	3	Y	N	Y	Y	N
33	1097189	3	Y	N	N	N	N
34	174062	6	N	Y	N	N	N
35	1531938	6	Y	N	N	N	N
36	300867	1	N	Y	N	N	N
37	1547598	1	N	Y	N	N	N
38	755841	-	Y	N	N	N	N
39	845371	-	Y	N	N	N	TELMISARTAN, METFORMIN, PREGABALIN,NSAID
40	91284	4	Y	N	N	Y	SAROGLITAZAR,AMLODIPINE

S NO.	MRD NO	TENSION		INTERFERENCE WITH DAILY ACTIVITIES		EAT
		GENERAL EMOTIONAL WELL BEING DISTURBANCE	IRRITABLE,TENSE OR FRUSTRATED	FUN ACTIVITIES DISTURBANCE	DECREASE IN ENJOYMENT	DECREASE IN ABILITY TO EAT OR DRINK
1	1287275	4	5	2	2	1
2	1472942	1	1	1	1	1
3	1390934	3	3	1	1	3
4	1292251	3	3	1	1	1
5	561979	5	5	5	5	3
6	1346381	4	5	5	5	5
7	1354222	3	3	1	1	1
8	1472867	1	2	1	1	1
9	269297	3	1	1	1	1
10	1342277	1	2	2	2	2
11	1461139	1	2	1	1	1
12	1452674	1	1	1	1	1
13	1417848	1	1	1	1	1
14	1353632	1	1	1	1	1
15	1377178	4	4	2	2	2
16	667060	1	2	1	1	1
17	1023406	1	3	2	1	1
18	1375519	2	2	5	5	1
19	1406777	2	2	1	1	3
20	1311298	1	1	1	1	1
21	1295126	1	1	1	1	1
22	1468546	1	1	1	1	1
23	97555	1	1	1	1	1
24	1396380	3	3	3	4	1
25	652001	5	5	1	1	1
26	898102	1	1	1	1	1
27	1477269	1	1	1	1	1
28	1477298	5	5	2	2	2
29	1474741	2	2	1	1	1
30	1278081	2	2	1	1	1
31	539872	2	2	1	1	1
32	1519298	1	1	1	1	1
33	1097189	2	2	2	2	2
34	174062	2	2	2	2	2
35	1531938	1	2	1	1	1
36	300867	2	1	2	1	1
37	1547598	2	2	1	1	1
38	755841	2	2	2	2	1
39	845371	2	2	2	2	2
40	91284	2	2	2	2	2

S NO.	MRD NO	QUESTIONNARIE			
		SHORT FORM NEPEAN DYSPEPSIA INDEX(SF-NDI)			
		NG/DRINKING	KNOWLEDGE & CONTROL		WORK/S
		DECREASE IN ENJOYMENT OF EATING & DRINKING	WONDERED PERSISTENCE OF PROBLEM	THOUGHT OF SERIOUS ILLNESS	DISTURBED ABILITY TO WORK OR STUDY
1	1287275	1	1	1	1
2	1472942	1	1	1	1
3	1390934	3	1	1	1
4	1292251	3	1	1	5
5	561979	3	4	5	5
6	1346381	5	5	1	5
7	1354222	1	1	1	1
8	1472867	3	2	1	1
9	269297	1	1	1	1
10	1342277	2	2	3	3
11	1461139	1	1	1	1
12	1452674	3	1	1	1
13	1417848	1	1	1	2
14	1353632	1	1	1	1
15	1377178	2	2	2	5
16	667060	1	1	1	1
17	1023406	1	2	2	1
18	1375519	1	2	2	2
19	1406777	3	1	1	2
20	1311298	1	1	1	3
21	1295126	1	1	1	1
22	1468546	1	1	1	1
23	97555	1	1	1	1
24	1396380	1	1	1	1
25	652001	1	1	1	1
26	898102	1	1	1	1
27	1477269	1	1	1	1
28	1477298	2	1	1	1
29	1474741	1	2	1	1
30	1278081	1	1	1	2
31	539872	1	1	1	1
32	1519298	2	1	1	1
33	1097189	2	2	2	2
34	174062	2	2	2	2
35	1531938	2	2	2	3
36	300867	1	2	1	1
37	1547598	1	1	1	1
38	755841	1	2	2	1
39	845371	2	2	2	2
40	91284	2	2	2	2

S NO.	MRD NO	TUDY	TOTAL VALUE	PATHOLOGY												
		DISTURBANCE IN ENJOYMENT OF WORK & STUDY		HB	TLC	DLC	PLATELETS	ESR	TSH	UREA	CREATININE	Na	K	BILI(T)	BILIRUBIN (D)	SGOT
1	1287275	1	19	-	-	0	-	0	-	-	-	-	-	-	-	-
2	1472942	1	10	-	-	0	-	0	-	-	-	-	-	-	-	48
3	1390934	1	18	-	-	0	-	0	-	-	-	-	-	-	-	-
4	1292251	4	23	-	-	0	-	0	-	-	-	-	-	-	-	-
5	561979	5	45	15.2	9	0	255	0	-	-	0.6	-	-	-	-	13
6	1346381	5	45	-	-	0	-	0	-	-	-	-	-	-	-	-
7	1354222	1	14	12.8	7.3	0	275	0	-	-	-	-	-	-	-	27
8	1472867	1	14	-	-	0	-	0	-	-	-	-	-	-	-	-
9	269297	1	12	-	-	0	-	0	-	-	0.9	-	-	1.7	-	22
10	1342277	3	22	-	-	0	-	0	-	-	-	-	-	-	-	-
11	1461139	1	11	10.2	14	0	260	0	-	-	0.6	-	-	-	-	34
12	1452674	1	12	-	-	0	-	0	-	-	0.71	-	-	-	-	-
13	1417848	2	12	-	-	0	-	0	-	-	-	-	-	-	-	-
14	1353632	1	10	-	-	0	-	0	-	-	-	-	-	-	-	-
15	1377178	5	30	8.9	8.5	0	273	0	-	-	0.8	-	-	-	-	16
16	667060	1	11	12.3	9	0	194	0	2.2	-	-	-	-	-	-	30
17	1023406	1	15	12	5.7	0	215	0	2.26	-	0.7	-	-	-	-	46
18	1375519	2	24	13.7	10.1	0	352	0	2.5	-	-	-	-	-	-	26
19	1406777	2	18	10.3	9.1	0	192	0	1.64	-	0.8	-	-	-	-	32
20	1311298	1	12	10	9	0	189	0	-	-	-	-	-	-	-	40
21	1295126	1	10	-	-	0	-	0	-	-	-	-	-	0.37	0.08	17
22	1468546	1	10	8.6	6.9	0	160	0	-	-	0.6	-	-	-	-	37
23	97555	1	10	8.8	13.4	0	210	0	-	18	0.88	140	4.9	-	-	31
24	1396380	1	19	-	-	0	-	0	1.39	-	-	-	-	0.8	-	30
25	652001	1	18	13.4	6.6	0	100	0	-	-	-	-	-	-	-	-
26	898102	1	10	-	-	0	-	0	-	-	-	-	-	-	-	-
27	1477269	1	10	-	-	0	-	0	-	-	-	-	-	-	-	-
28	1477298	1	22	8.4	7.1	0	283	0	-	-	-	-	-	-	-	-
29	1474741	1	13	11.5	9.2	0	154	0	2.41	-	-	-	-	-	-	25
30	1278081	1	13	-	-	0	-	0	-	-	-	-	-	-	-	64
31	539872	1	12	-	-	0	-	0	-	-	-	-	-	-	-	-
32	1519298	1	11	10.8	8	0	263	0	-	-	0.7	-	-	-	-	49
33	1097189	2	20	-	-	0	-	0	-	81	1.84	-	-	-	-	24
34	174062	2	20	-	-	0	-	0	-	-	-	-	-	-	-	-
35	1531938	2	17	16	7.1	0	157	0	-	-	0.7	-	-	-	-	70
36	300867	1	13	-	-	0	-	0	-	-	-	-	-	-	-	-
37	1547598	1	12	-	-	0	-	0	-	-	-	-	-	-	-	-
38	755841	1	16	-	-	0	-	0	-	-	-	-	-	-	-	-
39	845371	2	20	12.2	12.3	0	115	0	-	-	-	-	-	-	-	-
40	91284	2	20	13.8	6.8	0	98	0	4.67	36	1.2	-	-	1.5	0.5	25

S NO.	MRD NO	INVESTIGATIONS													
		BLOOD SAMPLES													IMA(
		BIOCHEMISTRY									MICROBIOLOGY				
		SGPT	ALP	PROTEIN	ALBUMIN	AMYLASE	LIPASE	CHOLESTROL	TRIGLYCERIDE	LDL	ANTI-TTG	HBsAg	ANTI-HCV	ANTI-HIV	ENDOSCOPY
1	1287275	-	-	-	-	-	-	-	-	-	-	-	-	-	NAD
2	1472942	55	-	-	-	0	-	-	-	-	-	-	-	-	RUT+
3	1390934	-	-	-	-	0	-	-	-	-	-	-	-	-	-
4	1292251	-	-	-	-	0	-	-	-	-	-	-	-	-	-
5	561979	18	-	-	-	0	-	-	-	-	-	-	-	-	-
6	1346381	-	-	-	-	0	-	-	-	-	-	-	-	-	NAD
7	1354222	21	-	-	-	0	-	-	-	-	-	-	-	-	-
8	1472867	-	-	-	-	0	-	-	-	-	-	-	-	-	-
9	269297	25	-	-	-	0	-	-	-	-	-	-	-	-	-
10	1342277	-	-	-	-	0	-	-	-	-	-	-	-	-	-
11	1461139	75	-	-	-	0	-	-	-	-	-	-	-	-	-
12	1452674	-	-	-	-	0	-	-	-	-	-	-	-	-	-
13	1417848	-	-	-	-	0	-	-	-	-	-	-	-	-	-
14	1353632	-	-	-	-	0	-	-	-	-	-	-	-	-	-
15	1377178	23	-	-	-	0	-	-	-	-	0.2	-	-	-	-
16	667060	35	-	-	-	0	-	-	-	-	-	-	-	-	-
17	1023406	46	-	-	-	0	-	-	-	-	-	-	-	-	-
18	1375519	16	-	-	-	0	-	-	-	-	-	-	-	-	-
19	1406777	32	-	-	-	0	-	-	-	-	0.1	-	-	-	-
20	1311298	45	-	-	-	0	-	-	-	-	-	-	-	-	-
21	1295126	17	7.1	4.11	-	0	-	-	-	-	-	-	-	-	-
22	1468546	19	-	-	-	0	-	160	150	99	0.2	-	-	-	-
23	97555	39	-	-	-	0	-	-	-	-	-	-	-	-	-
24	1396380	24	-	-	-	0	-	-	-	-	-	-	-	-	-
25	652001	-	-	-	-	0	-	-	-	-	-	-	-	-	-
26	898102	-	-	-	-	0	-	-	-	-	-	-	-	-	-
27	1477269	-	-	-	-	0	-	-	-	-	-	-	-	-	-
28	1477298	-	-	-	-	0	-	-	-	-	-	-	-	-	-
29	1474741	21	-	-	-	0	116	-	-	-	-	-	-	-	-
30	1278081	65	-	-	-	0	-	-	-	-	-	-	-	-	-
31	539872	-	-	-	-	0	-	-	-	-	0.01	-	-	-	-
32	1519298	67	-	-	-	0	-	-	-	-	-	-	-	-	-
33	1097189	15	-	-	-	0	-	-	-	-	-	-	-	-	-
34	174062	-	-	-	-	0	-	-	-	-	-	-	-	-	-
35	1531938	41	-	-	-	0	-	-	-	-	-	-	-	-	-
36	300867	-	-	-	-	0	-	-	-	-	-	-	-	-	-
37	1547598	-	-	-	-	0	-	-	-	-	-	-	-	-	GERD
38	755841	-	-	-	-	0	-	-	-	-	-	-	-	-	-
39	845371	-	-	-	-	0	-	-	-	-	-	-	-	-	-
40	91284	27	-	-	-	0	-	-	-	-	-	-	-	-	-

S NO.	MRD NO	GING STUDIES	DYSPEPSIA TYPE	COVID				AGE	GENDER	SCORE	DM	HTN
		ULTRASOUND ABDOMEN		COVID STATUS	VACCINATION	NO. OF VACCINATIONS	NAME OF VACCINE					
1	1287275	NAD	FD	N	Y	2	-	37	M	10	N	N
2	1472942	-	OD HP INFECTION	N	Y	2	COVISHIELD	26	F	10	N	N
3	1390934	-	FD	N	N	N	N	75	M	10	Y	N
4	1292251	LEFT TINY RENAL CALCULI	FD	N	Y	1	COVAXIN	55	M	10	N	N
5	561979	UNCOMPLIC ATED CHOLELITHIASIS	OD CHOLELITHIAISIS	N	Y	2	COVISHIELD	33	F	10	N	N
6	1346381	NAD	FD	N	Y	2	COVISHIELD	80	F	10	N	Y
7	1354222	FATTY LIVER GRADE 1	FD	N	Y	2	NA	80	M	10	Y	Y
8	1472867	-	FD	N	Y	3	COVIDHIELD	27	F	10	N	N
9	269297	BORDERLINE PROSTATOMEGALY	FD	N	Y	3	COVIDHIELD	49	M	10	N	N
10	1342277	NAD	FD	N	Y	2	COVIDHIELD	49	F	10	N	N
11	1461139	FATTY LIVER GRADE 1-2	FD	N	Y	3	COVIDHIELD	26	M	10	N	N
12	1452674	UTERINE FIBROID , FATTY LIVER GRADE1	FD	N	Y	2	NA	71	F	10	N	Y
13	1417848	NAD	FD	N	Y	2	COVIDHIELD	43	F	11	N	N
14	1353632	CYSTITIS ,PROSTATOMEGALY	FD	N	Y	2	COVIDHIELD	23	M	10	N	N
15	1377178	NAD	FD	N	Y	2	NA	50	F	10	N	N
16	667060	FATTY LIVER GRADE 3 S3F1	FD	N	Y	2	NA	67	F	10	N	Y
17	1023406	FATTY LIVER GRADE 1	FD	N	Y	2	COVISHIELD	54	M	11	Y	N
18	1375519	FATTY LIVER GRADE 2	FD	N	Y	2	NA	26	M	10	N	N
19	1406777	RIGHT RENAL PARENCHYMAL CHANGES 1	FD	N	Y	NA	NA	61	F	10	N	Y
20	1311298	-	FD	N	Y	2	COVAXIN	67	F	10	N	Y
21	1295126	NAD	FD	N	Y	2	COVAXIN	48	F	10	N	N
22	1468546	HSM FATTY LIVER GARDE 2	FD	N	Y	2	NA	20	M	10	N	N
23	97555	-	FD	N	Y	2	NA	68	F	10	Y	N
24	1396380	BILATERAL PCOD	FD	N	Y	2	COVISHIELD	34	F	11	N	N
25	652001	NAD	FD	N	Y	2	COVISHIELD	67	M	10	N	Y
26	898102	FATTY LIVER GRADE 1	FD	N	Y	NA	NA	49	F	10	N	N
27	1477269	CHRONIC CHOLECYSTITIS WITH STONE	OD CHOLELITHIASIS	N	Y	2	COVISHIELD	76	F	10	N	Y
28	1477298	SLIGHT THICKENED ENDOMETRIUM	FD	N	Y	1	NA	79	F	10	N	N
29	1474741	-	FD	N	Y	2	COVAXIN	40	M	10	N	N
30	1278081	FATTY LIVER GRADE 1	FD	N	Y	2	NA	75	M	10	N	Y
31	539872	NAD	FD	N	Y	2	NA	44	F	10	N	N
32	1519298	HEPATOMEGALY FATTY LIVER 1	FD	N	Y	2	COVISHIELD	67	F	10	N	Y
33	1097189	NAD	FD	N	N	NA	NA	26	F	13	N	N
34	174062	-	FD	N	Y	2	COVISHIELD	21	F	10	N	N
35	1531938	-	FD	N	N	N	N	24	F	10	N	N
36	300867	NAD	FD	N	Y	NA	NA	56	M	11	Y	N
37	1547598	NAD	GERD	N	Y	2	NA	72	M	10	N	N
38	755841	-	FD	N	Y	2	COVISHIELD	78	F	10	N	Y
39	845371	NAD	FD	N	Y	2	NA	56	M	10	N	N
40	91284	FATTY LIVER GRADE 1 S3F2	FD	N	Y	2	NA	56	M	10	Y	N

CONTROLS

S NO.	MRD NO	CAD	CKD	OTHERS	ALCOHOL	SMOKING	TOBACCO CHEWING	OPOIDS	OTHER	TYPE		MEALS PER DAY				
										VEG	NON VEG	1	2	3	4	5
1	1287275	N	N	N	Y	N	N	N	N	Y	N	N	N	Y	N	N
2	1472942	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
3	1390934	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
4	1292251	N	N	N	N	Y	Y	N	N	N	Y	N	N	Y	N	N
5	561979	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
6	1346381	N	Y	N	N	N	N	N	N	Y	N	N	N	Y	N	N
7	1354222	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
8	1472867	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
9	269297	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
10	1342277	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
11	1461139	N	N	N	Y	N	N	N	N	N	Y	N	N	Y	N	N
12	1452674	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
13	1417848	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
14	1353632	N	N	N	N	N	N	N	N	Y	Y	N	N	Y	N	N
15	1377178	N	N	RA	N	N	N	N	N	Y	N	N	N	Y	N	N
16	667060	Y	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
17	1023406	N	N	N	Y	N	N	N	N	Y	N	N	N	Y	N	N
18	1375519	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N
19	1406777	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
20	1311298	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
21	1295126	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
22	1468546	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
23	97555	Y	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
24	1396380	N	N	N	N	N	N	N	N	Y	N	N	Y	Y	N	N
25	652001	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
26	898102	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
27	1477269	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
28	1477298	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N
29	1474741	N	N	N	N	Y	N	N	N	N	Y	N	N	Y	N	N
30	1278081	N	N	PROSTATOMEGALY	N	N	N	N	N	Y	N	N	N	Y	N	N
31	539872	N	N	-	N	N	N	N	N	Y	N	N	N	Y	N	N
32	1519298	Y	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N
33	1097189	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
34	174062	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
35	1531938	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
36	300867	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
37	1547598	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
38	755841	N	Y	N	N	N	N	N	N	Y	N	N	Y	N	N	N
39	845371	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
40	91284	N	N	N	Y	N	N	N	N	Y	N	N	N	Y	N	N

S NO.	MRD NO	DIET AND ACTIVITIY							SELF REPORTED INTOLERANCE		SELF REPORTED FOOD INTOLERANCE
			EATING SPEED			LEVEL OF ACTIVITY			GLUTEN	MILK	
		6	SLOW	MODERATE	FAST	SEDENTARY	MODERATE	HARD			
1	1287275	N	N	N	Y	N	Y	N	N	N	N
2	1472942	N	N	Y	N	Y	N	N	N	N	N
3	1390934	N	N	Y	N	Y	N	N	N	N	N
4	1292251	N	Y	N	N	Y	N	N	N	N	N
5	561979	N	N	Y	N	N	Y	N	N	N	N
6	1346381	N	N	Y	N	Y	N	N	N	N	TEA
7	1354222	N	N	Y	N	Y	N	N	N	N	N
8	1472867	N	Y	N	N	Y	N	N	N	N	N
9	269297	N	N	N	Y	Y	N	N	N	N	N
10	1342277	N	N	Y	N	Y	N	N	N	N	N
11	1461139	N	Y	N	N	N	Y	N	N	N	N
12	1452674	N	N	Y	N	Y	N	N	N	N	N
13	1417848	N	N	N	Y	Y	N	N	N	N	SPICES
14	1353632	N	Y	N	N	Y	N	N	N	N	N
15	1377178	N	N	Y	N	Y	N	N	N	N	N
16	667060	N	N	Y	N	Y	N	N	N	N	N
17	1023406	N	N	Y	N	N	Y	N	N	N	N
18	1375519	Y	N	Y	N	Y	N	N	N	N	N
19	1406777	N	Y	N	N	Y	N	N	N	N	OILY FOOD
20	1311298	N	N	N	Y	Y	N	N	N	N	N
21	1295126	N	N	Y	N	Y	N	N	N	N	N
22	1468546	N	N	Y	N	N	Y	N	N	N	N
23	97555	N	N	Y	N	N	Y	N	N	N	N
24	1396380	N	Y	N	N	N	Y	N	N	N	N
25	652001	N	Y	N	N	Y	N	N	N	N	OILY FOOD
26	898102	N	N	Y	N	Y	N	N	N	N	N
27	1477269	N	N	Y	N	Y	N	N	N	N	SPICES, OILY FOOD
28	1477298	N	N	Y	N	Y	N	N	N	N	SPICES
29	1474741	N	N	Y	N	Y	N	N	N	N	N
30	1278081	N	N	Y	N	Y	N	N	N	N	N
31	539872	N	N	Y	N	N	Y	N	N	N	N
32	1519298	N	N	Y	N	Y	N	N	N	N	N
33	1097189	N	N	N	Y	Y	N	N	N	N	N
34	174062	N	N	Y	N	Y	N	N	N	N	N
35	1531938	N	N	Y	N	Y	N	N	N	N	N
36	300867	N	N	Y	N	Y	N	N	N	N	N
37	1547598	N	N	Y	N	N	Y	N	N	N	FRUITS
38	755841	N	N	Y	N	N	Y	N	N	N	N
39	845371	N	Y	N	N	N	Y	N	N	N	N
40	91284	N	N	Y	N	Y	N	N	N	N	N

S NO.	MRD NO	DEMOGRAPHICS									CO	
		AGE	GENDER	WEIGHT	HEIGHT	BMI	QUALIFICATION	OCCUPATION	ADDRESS	CONTACT	DIABETES MELLITUS	HYPERTENSION
41	1547647	58	F	63	1.64	23.42355741	8	HOUSEWIFE	LUDHIANA RURAL	9797593335	N	N
42	1388733	36	F	51	1.67	18.28677973	5	HOUSEWIFE	JAMMU URBAN	7696782572	N	N
43	1544497	38	M	91	1.76	29.37758264	GRADUATE	BUSINESS	LUDHIANA URBAN	6280777640	N	N
44	1548842	37	F	49.8	1.61	19.21222175	5	HOUSEWIFE	LUDHIANA URBAN	7508619986	N	N
45	1381744	26	F	53	1.64	19.70553242	DIPLOMA	PVT JOB	LUDHIANA URBAN	7986121750	N	N
46	1490181	35	M	82	1.79	25.59220998	GRADUATE	FARMER	LUDHIANA RURAL	9427818867	N	N
47	1545212	40	F	70.2	1.61	27.08228849	10	PVT JOB	LUDHIANA URBAN	8146887550	N	N
48	35466	62	M	60	1.79	18.7260073	GRADUATE	GOVT JOB RETIRED	PHILLAUR URBAN	9483530960	N	N
49	852628	61	F	72	1.67	25.81663021	12	HOUSEWIFE	LUDHIANA URBAN	7696473601	Y	Y
50	1430645	48	F	59	1.61	22.76146754	10	HOUSEWIFE	HOSHIARPUR URBAN	9877693290	N	Y
51	1549038	31	F	49	1.7	16.9550173	12	PVT JOB	LUDHIANA RURAL	8360051214	N	N
52	1479477	34	F	53	1.58	21.23057202	12	HOUSEWIFE	JAMMU RURAL	7743048227	N	N
53	471836	45	F	74	1.64	27.51338489	5	HOUSEWIFE	MALERKOTLA URBAN	9855388422	N	N
54	1377271	45	F	53	1.7	18.33910035	0	HOUSEWIFE	LUDHIANA URBAN	9257335908	N	N
55	1289191	20	M	61	1.55	25.39021852	12	STUDENT	KASHMIR RURAL	6005776216	N	N
56	1556858	55	M	93	1.79	29.02531132	7	PVT JOB	MOGA URBAN	9417977125	N	N
57	1548733	40	F	59	1.58	23.63403301	GRADUATE	GOVT JOB	PATHANKOT URBAN	6005185093	N	N
58	1515243	50	F	59	1.55	24.55775234	0	HOUSEWIFE	KAPURTHALA URBAN	8837699910	N	N
59	1557018	52	F	75	1.73	25.05930703	0	HOUSEWIFE	LUDHIANA URBAN	9815503614	N	N
60	294682	61	F	57	1.61	21.98989237	5	HOUSEWIFE	LUDHIANA URBAN	9988367286	N	N
61	1557040	68	F	58	1.67	20.79672989	2	HOUSEWIFE	FEROZPUR URBAN	8360419006	Y	N
62	1300771	26	M	59	1.73	19.71332153	8	PVT JOB	PHILLAUR URBAN	9501805236	N	N
63	1561319	40	F	52	1.61	20.06095444	10	HOUSEWIFE	FARIDKOT RURAL	9463702759	N	N
64	924476	43	M	60	1.7	20.76124567	10	FARMER	LUDHIANA URBAN	9463965750	N	N
65	1561381	64	F	69	1.7	23.87543253	10	HOUSEWIFE	LUDHIANA URBAN	7888689912	N	N
66	1447098	35	M	73.2	1.76	23.63119835	GRADUATE	GOVT JOB	LUDHIANA URBAN	9646152123	N	N
67	1559700	56	F	85	1.73	28.40054796	0	HOUSEWIFE	GURDASPUR URBAN	9815055585	N	N
68	719509	23	F	45	1.58	18.02595738	GRADUATE	STUDENT	LUDHIANA URBAN	9872641214	N	N
69	46860	55	F	78	1.64	29.00059488	12	HOUSEWIFE	LUDHIANA URBAN	9781269120	N	N
70	1704681	64	F	65	1.64	24.1671624	10	HOUSEWIFE	LUDHIANA URBAN	9463018799	N	N
71	26675	63	F	65	1.64	24.1671624	8	HOUSEWIFE	SIRSA URBAN	9996619719	N	N
72	1702889	74	F	58	1.55	24.14151925	5	HOUSEWIFE	LUDHIANA URBAN	9417864288	Y	Y
73	1701032	33	M	75	1.7	25.95155709	GRADUATE	PVT JOB	LUDHIANA URBAN	7986833565	N	N
74	1166362	19	F	58	1.7	20.06920415	10	STUDENT	LUDHIANA URBAN	9854005500	N	N
75	1701195	26	M	82	1.67	29.4022733	GRADUATE	PVT JOB	LUDHIANA RURAL	6239771493	N	N
76	1701147	59	F	64	1.58	25.63691716	10	HOUSEWIFE	LUDHIANA URBAN	9459775019	N	Y
77	1676897	18	M	74	1.73	24.72518293	10	STUDENT	LUDHIANA URBAN	7347563763	N	N
78	1426690	57	F	78	1.73	26.06167931	10	HOUSEWIFE	JAMMU URBAN	7006003241	Y	N
79	1646379	27	F	65	1.64	24.1671624	GRADUATE	PVT JOB	LUDHIANA URBAN	6005001760	N	N
80	1579415	60	M	103	1.7	35.64013841	5	FARMER	MANSA RURAL	9814404075	N	N

S NO.	MRD NO	MORBIDITIES				SUBSTANCE ABUSE					DIET AND ACTIVITIY										
											TYPE		MEALS PER DAY						EATING SPEED		
		CAD	CKD	THYROID DS	OTHER	ALCOHOL	SMOKING	TOBACCO CHEWING	OPOIDS	OTHER	VEG	NON VEG	1	2	3	4	5	6	SLOW	MODERATE	FAST
41	1547647	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
42	1388733	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
43	1544497	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
44	1548842	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
45	1381744	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
46	1490181	N	N	N	N	Y	Y	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
47	1545212	N	N	N	AN	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
48	35466	N	N	N	DEPRESSION	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
49	852628	N	N	N	N	N	N	N	N	-	Y	N	N	N	Y	N	N	N	Y	N	N
50	1430645	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
51	1549038	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
52	1479477	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
53	471836	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
54	1377271	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
55	1289191	N	N	N	N	N	N	N	N	-	N	Y	N	Y	N	N	N	N	N	N	Y
56	1556858	N	N	N	COPD	Y	Y	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
57	1548733	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
58	1515243	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
59	1557018	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
60	294682	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
61	1557040	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
62	1300771	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	Y	N	N
63	1561319	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
64	924476	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
65	1561381	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N	N
66	1447098	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N	N
67	1559700	N	N	N	BETA THALASSEMIA	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y
68	719509	N	N	N	SEIZURE DISORDER	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
69	46860	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
70	1704681	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
71	26675	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
72	1702889	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
73	1701032	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
74	1166362	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
75	1701195	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
76	1701147	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
77	1676897	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
78	1426690	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	N
79	1646379	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	N	Y
80	1579415	N	N	N	DYSLIPIDEMIA	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N

S NO.	MRD NO	LEVEL OF ACTIVITY			ALARM SYMPTOMS					
		SEDENTARY	MODERATE	HARD	AGE >60	ANEMIA	GI BLEED	PROGESSIVE DYSPHAGIA	PERSISTENT VOMITING	UNINTENTIONAL WEIGHT LOSS
41	1547647	Y	N	N	Y	N	N	N	N	N
42	1388733	Y	N	N	N	N	N	N	N	N
43	1544497	Y	N	N	N	N	N	N	N	N
44	1548842	N	Y	N	N	N	N	N	N	N
45	1381744	N	Y	N	N	N	N	N	N	N
46	1490181	N	Y	N	N	N	N	N	N	N
47	1545212	N	Y	N	N	N	N	N	N	N
48	35466	Y	N	N	Y	N	N	N	N	N
49	852628	Y	N	N	Y	N	N	N	N	N
50	1430645	N	Y	N	N	N	N	N	N	N
51	1549038	N	Y	N	N	N	N	N	N	N
52	1479477	N	Y	N	N	N	N	N	N	N
53	471836	N	Y	N	N	N	N	N	N	N
54	1377271	N	Y	N	N	N	N	N	N	N
55	1289191	N	Y	N	N	N	N	N	N	N
56	1556858	Y	N	N	N	N	N	N	N	N
57	1548733	N	Y	N	N	N	N	N	N	N
58	1515243	Y	N	N	N	N	N	N	N	N
59	1557018	Y	N	N	N	N	N	N	N	N
60	294682	Y	N	N	Y	N	N	N	N	N
61	1557040	Y	N	N	Y	N	N	N	N	N
62	1300771	N	N	Y	N	N	N	N	N	N
63	1561319	Y	N	N	N	N	N	N	N	N
64	924476	Y	N	N	N	N	N	N	N	N
65	1561381	Y	N	N	Y	N	N	N	N	N
66	1447098	Y	N	N	N	N	N	N	N	N
67	1559700	Y	N	N	N	N	N	N	N	N
68	719509	Y	N	N	N	N	N	N	N	N
69	46860	Y	N	N	N	N	N	N	N	N
70	1704681	Y	N	N	Y	N	N	N	N	N
71	26675	Y	N	N	Y	N	N	N	N	N
72	1702889	Y	N	N	Y	N	N	N	N	N
73	1701032	Y	N	N	N	N	N	N	N	N
74	1166362	Y	N	N	N	N	N	N	N	N
75	1701195	Y	N	N	N	N	N	N	N	N
76	1701147	Y	N	N	N	N	N	N	N	N
77	1676897	Y	N	N	N	N	N	N	N	N
78	1426690	N	Y	N	N	N	N	N	N	N
79	1646379	Y	N	N	N	N	N	N	N	N
80	1579415	Y	N	N	N	N	N	N	N	N

S NO.	MRD NO			SELF REPORTED INTOLERANCE		SELF REPORTED FOOD INTOLERANCE		
		FAMILY HISTORY OF MALIGNANCY/PALPABLE LUMP	HISTORY OF NSAID INTAKE	GLUTEN	MILK		EPIGASTRIC PA	
							FREQUENCY	INTENSITY
41	1547647	N	N	N	Y	SPICES, OILY	0	0
42	1388733	N	N	N	N	N	0	0
43	1544497	N	N	N	N	N	1	1
44	1548842	N	N	N	N	N	1	1
45	1381744	N	N	N	N	SPICES, OILY	0	0
46	1490181	N	N	N	N	N	1	1
47	1545212	N	N	N	N	N	1	1
48	35466	N	N	N	N	SPICES, OILY	0	0
49	852628	N	N	N	N	N	1	1
50	1430645	N	N	N	N	SPICES, SALTY, OILY	0	0
51	1549038	N	N	N	N	SPICES, SALTY	4	3
52	1479477	N	N	N	N	SPICES	1	1
53	471836	N	N	N	N	SPICES, OILY	0	0
54	1377271	N	N	N	N	SPICES	0	0
55	1289191	N	N	N	N	SPICES, OILY	0	0
56	1556858	N	Y	N	N	N	1	1
57	1548733	N	N	N	Y	SPICES	0	0
58	1515243	N	N	N	N	N	1	1
59	1557018	N	N	N	Y	SPICES, OILY	0	0
60	294682	N	Y	N	N	SPICES, OILY	0	0
61	1557040	N	Y	N	Y	SPICES, OILY	1	1
62	1300771	N	N	Y	N	N	0	0
63	1561319	N	N	N	N	PICKLE	0	0
64	924476	N	N	N	N	N	0	0
65	1561381	N	N	N	N	OILY FOOD	0	0
66	1447098	N	N	N	N	N	0	0
67	1559700	N	Y	N	N	N	4	4
68	719509	N	N	N	N	TEA	0	0
69	46860	N	N	N	N	SPICES, OILY	1	1
70	1704681	N	N	N	N	TEA	1	1
71	26675	N	N	N	N	N	1	1
72	1702889	N	N	N	N	SPICES	0	0
73	1701032	N	N	Y	N	TEA	1	1
74	1166362	N	N	N	N	N	0	0
75	1701195	N	N	N	N	N	2	3
76	1701147	N	N	N	N	N	1	2
77	1676897	N	N	N	N	N	0	0
78	1426690	N	Y	N	N	TEA	0	0
79	1646379	N	N	N	N	N	0	0
80	1579415	N	Y	N	N	SPICES, OILY	0	0

S NO.	MRD NO	CARDINAL SYMPTOMS										
		AIN/ACHE	EPIGASTRIC BURNING			EARLY SATIETY			POST PRANDIAL FULLNESS			
		BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY
41	1547647	0	1	1	1	0	0	0	0	0	0	0
42	1388733	0	0	0	0	2	2	2	0	0	0	0
43	1544497	1	1	1	1	0	0	0	0	0	0	0
44	1548842	1	1	1	1	0	0	0	0	0	0	0
45	1381744	0	1	1	1	0	0	0	0	0	0	0
46	1490181	1	1	1	1	0	0	0	0	0	0	0
47	1545212	1	0	0	0	0	0	0	1	1	1	0
48	35466	0	0	0	0	2	1	2	0	0	0	4
49	852628	1	2	3	2	0	0	0	0	0	0	0
50	1430645	0	0	0	0	2	2	2	0	0	0	0
51	1549038	3	2	2	2	0	0	0	0	0	0	4
52	1479477	1	1	1	1	0	0	0	0	0	0	1
53	471836	0	2	3	3	1	1	1	0	0	0	0
54	1377271	0	0	0	0	0	0	0	0	0	0	0
55	1289191	0	2	2	1	1	1	1	0	0	0	1
56	1556858	1	0	0	0	0	0	0	0	0	0	0
57	1548733	0	2	2	2	0	0	0	0	0	0	0
58	1515243	1	0	0	0	0	0	0	0	0	0	0
59	1557018	0	0	0	0	2	2	2	0	0	0	0
60	294682	0	0	0	0	0	0	0	1	1	1	0
61	1557040	1	1	1	1	0	0	0	0	0	0	0
62	1300771	0	0	0	0	1	1	1	0	0	0	0
63	1561319	0	0	0	0	0	0	0	2	2	2	0
64	924476	0	2	2	2	0	0	0	0	0	0	0
65	1561381	0	0	0	0	0	0	0	0	0	0	0
66	1447098	0	0	0	0	0	0	0	0	0	0	0
67	1559700	4	4	4	4	0	0	0	0	0	0	0
68	719509	0	0	0	0	1	1	1	0	0	0	0
69	46860	1	0	0	0	0	0	0	0	0	0	0
70	1704681	1	1	1	1	1	1	1	0	0	0	1
71	26675	1	0	0	0	0	0	0	0	0	0	1
72	1702889	0	4	3	3	0	0	0	0	0	0	1
73	1701032	1	0	0	0	0	0	0	0	0	0	0
74	1166362	0	1	1	1	0	0	0	0	0	0	2
75	1701195	3	0	0	0	0	0	0	0	0	0	2
76	1701147	2	1	1	1	0	0	0	0	0	0	2
77	1676897	0	1	1	1	0	0	0	0	0	0	0
78	1426690	0	1	1	1	0	0	0	0	0	0	0
79	1646379	0	1	1	1	0	0	0	0	0	0	0
80	1579415	0	1	1	1	0	0	0	0	0	0	0

S NO.	MRD NO	SYMP									
		UPPER ABDOMEN DISCOMFORT		BURNING SENSATION IN CHEST			UPPER ABDOMEN CRAMPS			PAIN /ACHE IN CHEST	
		INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY
41	1547647	0	0	1	1	1	0	0	0	0	0
42	1388733	0	0	0	0	0	0	0	0	0	0
43	1544497	0	0	0	0	0	0	0	0	0	0
44	1548842	0	0	0	0	0	0	0	0	0	0
45	1381744	0	0	0	0	0	0	0	0	0	0
46	1490181	0	0	0	0	0	0	0	0	0	0
47	1545212	0	0	0	0	0	0	0	0	0	0
48	35466	3	2	0	0	0	0	0	0	0	0
49	852628	0	0	0	0	0	0	0	0	0	0
50	1430645	0	0	0	0	0	0	0	0	0	0
51	1549038	3	3	0	0	0	0	0	0	0	0
52	1479477	1	1	0	0	0	0	0	0	0	0
53	471836	0	0	0	0	0	0	0	0	0	0
54	1377271	0	0	0	0	0	0	0	0	0	0
55	1289191	1	1	0	0	0	0	0	0	0	0
56	1556858	0	0	0	0	0	0	0	0	0	0
57	1548733	0	0	0	0	0	0	0	0	0	0
58	1515243	0	0	0	0	0	0	0	0	0	0
59	1557018	0	0	0	0	0	0	0	0	0	0
60	294682	0	0	0	0	0	0	0	0	0	0
61	1557040	0	0	0	0	0	0	0	0	0	0
62	1300771	0	0	0	0	0	0	0	0	0	0
63	1561319	0	0	0	0	0	0	0	0	0	0
64	924476	0	0	0	0	0	0	0	0	0	0
65	1561381	0	0	0	0	0	0	0	0	0	0
66	1447098	0	0	0	0	0	0	0	0	0	0
67	1559700	0	0	0	0	0	0	0	0	0	0
68	719509	0	0	0	0	0	0	0	0	0	0
69	46860	0	0	0	0	0	0	0	0	0	0
70	1704681	1	1	1	1	1	0	0	0	0	0
71	26675	1	1	0	0	0	0	0	0	0	0
72	1702889	2	2	0	0	0	0	0	0	0	0
73	1701032	0	0	1	1	1	0	0	0	0	0
74	1166362	2	2	0	0	0	0	0	0	0	0
75	1701195	2	2	0	0	0	0	0	0	0	0
76	1701147	2	2	0	0	0	0	0	0	0	0
77	1676897	0	0	0	0	0	0	0	0	0	0
78	1426690	0	0	0	0	0	0	0	0	0	0
79	1646379	0	0	1	1	1	0	0	0	0	0
80	1579415	0	0	0	0	0	0	0	0	0	0

CLINICAL HISTORY

'TOMS

S NO.	MRD NO	OTHERS										
			BITTER/SOUR TASTING FLUID IN THROAT/MOUTH			BLOATING/PRESSURE IN UPPER ABDOMEN			NAUSEA			
		BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUIENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY
41	1547647	0	0	0	0	2	2	2	0	0	0	1
42	1388733	0	0	0	0	1	1	1	0	0	0	0
43	1544497	0	0	0	0	1	1	1	0	0	0	2
44	1548842	0	0	0	0	0	0	0	0	0	0	1
45	1381744	0	0	0	0	1	1	1	1	1	1	1
46	1490181	0	0	0	0	0	0	0	1	1	1	1
47	1545212	0	0	0	0	0	0	0	0	0	0	1
48	35466	0	0	0	0	2	1	1	0	0	0	0
49	852628	0	0	0	0	0	0	0	0	0	0	0
50	1430645	0	0	0	0	2	2	2	0	0	0	1
51	1549038	0	0	0	0	1	1	1	0	0	0	0
52	1479477	0	0	0	0	1	1	1	0	0	0	0
53	471836	0	0	0	0	2	2	1	0	0	0	1
54	1377271	0	1	1	1	1	1	1	0	0	0	0
55	1289191	0	0	0	0	0	0	0	0	0	0	0
56	1556858	0	0	0	0	0	0	0	0	0	0	0
57	1548733	0	0	0	0	0	0	0	0	0	0	0
58	1515243	0	0	0	0	0	0	0	0	0	0	0
59	1557018	0	0	0	0	0	0	0	0	0	0	0
60	294682	0	0	0	0	0	0	0	0	0	0	0
61	1557040	0	0	0	0	0	0	0	0	0	0	0
62	1300771	0	0	0	0	0	0	0	0	0	0	0
63	1561319	0	0	0	0	0	0	0	0	0	0	0
64	924476	0	0	0	0	0	0	0	0	0	0	0
65	1561381	0	0	0	0	0	0	0	0	0	0	0
66	1447098	0	0	0	0	0	0	0	0	0	0	0
67	1559700	0	0	0	0	4	4	4	0	0	0	2
68	719509	0	0	0	0	1	1	1	0	0	0	0
69	46860	0	0	0	0	0	0	0	0	0	0	0
70	1704681	0	0	0	0	0	0	0	0	0	0	0
71	26675	0	4	3	3	0	0	0	0	0	0	0
72	1702889	0	0	0	0	0	0	0	0	0	0	0
73	1701032	0	0	0	0	0	0	0	1	1	1	0
74	1166362	0	0	0	0	0	0	0	0	0	0	1
75	1701195	0	0	0	0	2	2	2	0	0	0	1
76	1701147	0	0	0	0	1	1	1	0	0	0	1
77	1676897	0	0	0	0	1	1	1	0	0	0	2
78	1426690	0	0	0	0	2	2	2	1	1	1	1
79	1646379	0	0	0	0	0	0	0	1	1	1	2
80	1579415	0	0	0	0	0	0	0	0	0	0	1

S NO.	MRD NO										
										DURATION	
		BURPING/BELCHING		VOMITING			BAD BREATH			WEEKS	MONTHS
		INTENSITY	BOTHERSOMENESS	FREQEUNCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS		
41	1547647	1	1	0	0	0	0	0	0	-	6
42	1388733	0	0	0	0	0	2	1	1	-	-
43	1544497	2	2	0	0	0	0	0	0	-	9
44	1548842	1	1	0	0	0	0	0	0	-	-
45	1381744	1	1	0	0	0	0	0	0	-	-
46	1490181	1	1	0	0	0	0	0	0	-	6
47	1545212	1	1	0	0	0	0	0	0	-	-
48	35466	0	0	0	0	0	0	0	0	-	-
49	852628	0	0	0	0	0	0	0	0	-	-
50	1430645	1	1	0	0	0	0	0	0	-	-
51	1549038	0	0	0	0	0	0	0	0	-	-
52	1479477	0	0	0	0	0	0	0	0	-	-
53	471836	1	1	0	0	0	0	0	0	-	-
54	1377271	0	0	0	0	0	0	0	0	-	-
55	1289191	0	0	0	0	0	0	0	0	-	-
56	1556858	0	0	0	0	0	0	0	0	-	-
57	1548733	0	0	0	0	0	0	0	0	-	-
58	1515243	0	0	0	0	0	0	0	0	-	-
59	1557018	0	0	0	0	0	0	0	0	-	-
60	294682	0	0	0	0	0	0	0	0	-	-
61	1557040	0	0	0	0	0	0	0	0	-	-
62	1300771	0	0	0	0	0	0	0	0	-	-
63	1561319	0	0	0	0	0	0	0	0	-	-
64	924476	0	0	0	0	0	0	0	0	-	-
65	1561381	0	0	0	0	0	0	0	0	-	-
66	1447098	0	0	0	0	0	0	0	0	-	-
67	1559700	2	2	0	0	0	0	0	0	-	-
68	719509	0	0	0	0	0	0	0	0	-	-
69	46860	0	0	0	0	0	0	0	0	-	-
70	1704681	0	0	0	0	0	0	0	0	-	-
71	26675	0	0	0	0	0	0	0	0	-	-
72	1702889	0	0	0	0	0	0	0	0	-	-
73	1701032	0	0	0	0	0	1	1	1	-	-
74	1166362	2	2	0	0	0	0	0	0	-	9
75	1701195	1	1	0	0	0	0	0	0	-	8
76	1701147	1	1	0	0	0	0	0	0	-	-
77	1676897	2	2	0	0	0	0	0	0	-	-
78	1426690	1	1	0	0	0	0	0	0	-	-
79	1646379	2	2	0	0	0	0	0	0	-	-
80	1579415	1	1	0	0	0	1	1	1	-	-

S NO.	MRD NO		MEDICATIONS INTAKE				
		YEARS	PPI	H2RA	PROKINETICS	CENTRAL NEUROMODULATOR	OTHERS
41	1547647	-	Y	N	N	Y	PROBIOTIC
42	1388733	1	Y	Y	N	Y	PROBIOTIC
43	1544497	-	Y	N	N	N	N
44	1548842	10	Y	N	N	N	N
45	1381744	5	Y	N	N	Y	N
46	1490181	-	Y	N	Y	Y	N
47	1545212	1	Y	N	N	Y	PROBIOTIC
48	35466	20	Y	N	Y	N	LACTITOL
49	852628	10	Y	N	N	N	METFORMIN, TELMISARTAN
50	1430645	4	N	Y	N	N	TELMISARTAN
51	1549038	3	N	N	N	N	N
52	1479477	5	Y	N	Y	Y	N
53	471836	4	Y	N	N	Y	N
54	1377271	2	Y	N	Y	N	N
55	1289191	1	Y	N	N	N	N
56	1556858	4	Y	N	N	N	NSAID
57	1548733	1	Y	N	Y	Y	PROBITOC
58	1515243	1	Y	N	N	Y	N
59	1557018	1	Y	N	N	N	N
60	294682	1	Y	N	N	N	LACTITOL,ESPHAGUL,NSAID
61	1557040	1	Y	N	N	N	NSAID
62	1300771	5	Y	N	N	Y	N
63	1561319	10	Y	N	N	N	N
64	924476	10	Y	N	N	N	MULTIVITAMIN
65	1561381	10	Y	N	N	N	N
66	1447098	5	Y	N	N	N	N
67	1559700	15	Y	N	N	Y	UDCA
68	719509	1	Y	N	N	N	CARMAZEPINE, FOLIC ACID
69	46860	1	Y	N	N	Y	N
70	1704681	2	Y	N	N	N	N
71	26675	4	Y	Y	N	N	N
72	1702889	1	Y	N	N	N	N
73	1701032	5	Y	N	N	N	PROBIOTIC
74	1166362	-	N	Y	N	N	N
75	1701195	-	Y	N	N	N	N
76	1701147	6	Y	N	Y	N	N
77	1676897	5	Y	N	N	N	N
78	1426690	4	Y	N	N	N	NSAID
79	1646379	1	Y	N	N	N	N
80	1579415	8	Y	N	N	N	NSAID

S NO.	MRD NO	TENSION		INTERFERENCE WITH DAILY ACTIVITIES		EAT
		GENERAL EMOTIONAL WELL BEING DISTURBANCE	IRRITABLE,TENSE OR FRUSTRATED	FUN ACTIVITIES DISTURBANCE	DECREASE IN ENJOYMENT	DECREASE IN ABILITY TO EAT OR DRINK
41	1547647	2	2	1	1	2
42	1388733	1	1	1	1	1
43	1544497	2	2	1	1	1
44	1548842	1	1	1	1	1
45	1381744	5	5	2	2	1
46	1490181	1	1	1	1	1
47	1545212	1	1	1	1	1
48	35466	1	1	1	1	1
49	852628	2	2	1	1	2
50	1430645	2	2	2	2	1
51	1549038	2	2	2	2	1
52	1479477	2	2	1	1	1
53	471836	2	2	2	2	2
54	1377271	2	2	1	1	1
55	1289191	1	1	1	1	3
56	1556858	2	2	1	1	2
57	1548733	1	1	1	1	2
58	1515243	1	1	1	1	1
59	1557018	1	1	1	1	2
60	294682	1	1	1	1	2
61	1557040	2	2	2	2	1
62	1300771	1	1	2	2	2
63	1561319	2	2	1	1	2
64	924476	1	1	1	1	1
65	1561381	2	2	1	1	1
66	1447098	1	1	2	2	1
67	1559700	2	2	2	2	1
68	719509	2	2	1	1	1
69	46860	2	2	1	1	2
70	1704681	1	2	1	1	1
71	26675	2	1	2	1	1
72	1702889	2	2	1	1	1
73	1701032	2	2	2	2	1
74	1166362	2	2	2	2	2
75	1701195	2	2	2	2	2
76	1701147	2	2	1	1	2
77	1676897	1	1	1	1	1
78	1426690	2	2	1	1	1
79	1646379	1	1	1	1	1
80	1579415	5	5	2	2	1

S NO.	MRD NO	QUESTIONNARIE			
		SHORT FORM NEPEAN DYSPEPSIA INDEX(SF-NDI)			
		NG/DRINKING	KNOWLEDGE & CONTROL		WORK/S
		DECREASE IN ENJOYMENT OF EATING & DRINKING	WONDERED PERSISTENCE OF PROBLEM	THOUGHT OF SERIOUS ILLNESS	DISTURBED ABILITY TO WORK OR STUDY
41	1547647	1	1	1	1
42	1388733	1	1	1	1
43	1544497	1	1	2	2
44	1548842	1	1	1	2
45	1381744	1	1	1	1
46	1490181	1	1	1	1
47	1545212	1	1	1	1
48	35466	1	1	1	1
49	852628	2	1	1	1
50	1430645	1	1	1	1
51	1549038	1	1	1	1
52	1479477	1	1	1	1
53	471836	2	2	2	2
54	1377271	1	1	1	1
55	1289191	2	1	1	1
56	1556858	2	1	1	1
57	1548733	2	1	1	1
58	1515243	1	2	2	2
59	1557018	2	2	2	1
60	294682	2	1	1	1
61	1557040	1	1	1	1
62	1300771	2	1	2	1
63	1561319	2	1	1	1
64	924476	1	1	1	1
65	1561381	1	1	1	1
66	1447098	1	1	1	1
67	1559700	1	1	1	1
68	719509	1	1	1	1
69	46860	2	1	1	1
70	1704681	2	2	2	3
71	26675	1	2	1	1
72	1702889	1	1	1	1
73	1701032	1	2	2	1
74	1166362	2	2	2	2
75	1701195	2	2	2	2
76	1701147	1	1	1	1
77	1676897	1	1	1	1
78	1426690	1	1	2	2
79	1646379	1	1	1	2
80	1579415	1	1	1	1

S NO.	MRD NO	TUDY	TOTAL VALUE	PATHOLOGY													
		DISTURBANCE IN ENJOYMENT OF WORK & STUDY		HB	TLC	DLC	PLATELETS	ESR	TSH	UREA	CREATININE	Na	K	BILI(T)	BILIRUBIN (D)	SGOT
41	1547647	1	13	12.7	8.1	0	179	0	-	-	0.7	-	-	-	-	35
42	1388733	1	10	-	-	0	-	0	-	-	-	-	-	-	-	-
43	1544497	1	14	13.4	6.4	0	195	0	-	-	1.04	-	-	-	-	36
44	1548842	2	12	9.1	6.3	0	255	0	-	-	-	-	-	-	-	-
45	1381744	1	20	9.6	8.3	0	153	0	-	-	-	-	-	-	-	28
46	1490181	1	10	13.7	8.9	0	150	0	-	-	-	-	-	-	-	35
47	1545212	1	10	10.7	6.9	0	197	0	-	-	0.6	-	-	0.8	0.3	39
48	35466	1	10	-	-	0	-	0	-	-	0.7	-	-	-	-	14
49	852628	1	14	13.6	6.7	0	375	0	1.98	-	-	-	-	-	-	50
50	1430645	1	14	12.1	5.4	0	225	0	2.5	-	-	-	-	-	-	25
51	1549038	1	14	-	-	0	-	0	-	-	-	-	-	-	-	-
52	1479477	1	12	8.5	8	0	278	0	3.16	-	-	-	-	-	-	-
53	471836	2	20	10.8	8.92	0	156	0	-	-	-	-	-	-	-	-
54	1377271	1	12	12.4	7.4	0	175	0	-	-	-	-	-	-	-	25
55	1289191	1	13	-	-	0	-	0	-	-	-	-	-	-	-	-
56	1556858	1	14	-	-	0	-	0	2.31	34	1.2	-	-	-	-	39
57	1548733	1	12	11.6	8.3	0	168	0	3.42	-	0.69	-	-	-	-	24
58	1515243	2	14	11.1	7.4	0	285	0	-	-	0.77	-	-	-	-	22
59	1557018	1	14	13.8	10.9	0	275	0	-	24	1.09	-	-	-	-	22
60	294682	1	12	12.6	11.5	0	283	0	1.37	-	-	-	-	-	-	-
61	1557040	1	14	-	-	0	-	0	-	-	-	-	-	-	-	-
62	1300771	1	15	7.3	5.85	0	247	0	1.98	-	-	-	-	-	-	31
63	1561319	1	14	12.3	6.1	0	253	0	-	-	-	-	-	-	-	-
64	924476	1	10	13.6	6.04	0	230	0	-	-	-	-	-	1.59	-	-
65	1561381	1	12	-	-	0	-	0	-	-	-	-	-	-	-	-
66	1447098	1	12	-	-	0	-	0	-	-	-	-	-	-	-	-
67	1559700	1	14	10.3	8.6	0	203	0	0.29	-	-	-	-	-	-	-
68	719509	1	12	-	-	0	-	0	-	-	-	-	-	-	-	-
69	46860	1	14	11.5	7	0	140	0	2.55	-	0.56	-	-	-	-	51
70	1704681	2	17	-	-	0	-	0	-	-	-	-	-	-	-	-
71	26675	1	13	13	7.9	0	299	0	2.2	-	0.62	-	-	-	-	31
72	1702889	1	12	10.9	9.7	0	383	0	-	-	1.53	-	-	0.24	0.15	13
73	1701032	1	16	14.7	7.8	0	196	0	6.73	-	0.91	-	-	-	-	34
74	1166362	2	20	12	9.2	0	292	0	4.09	-	-	-	-	-	-	15
75	1701195	2	20	-	-	0	-	0	-	-	-	-	-	-	-	30
76	1701147	1	13	11.3	6.8	0	126	0	8.4	-	-	-	-	-	-	29
77	1676897	1	10	-	-	0	-	0	-	-	-	-	-	-	-	-
78	1426690	1	14	10.8	4.01	0	88	0	-	-	0.63	-	-	0.9	0.5	-
79	1646379	2	12	8.6	4.05	0	200	0	-	-	-	-	-	-	-	27
80	1579415	1	20	10.1	8.6	0	230	0	-	14	0.7	-	-	-	-	-

S NO.	MRD NO	INVESTIGATIONS													
		BLOOD SAMPLES													IMA(
		BIOCHEMISTRY									MICROBIOLOGY				
		SGPT	ALP	PROTEIN	ALBUMIN	AMYLASE	LIPASE	CHOLESTROL	TRIGLYCERIDE	LDL	ANTI-TTG	HBsAg	ANTI-HCV	ANTI-HIV	ENDOSCOPY
41	1547647	56	-	-	-	0	-	-	-	-	-	-	-	-	-
42	1388733	-	-	-	-	0	-	-	-	-	-	-	-	-	-
43	1544497	26	-	-	-	0	-	-	-	-	-	-	-	-	-
44	1548842	-	-	-	-	0	-	160	100	-	-	-	-	-	-
45	1381744	17	-	-	-	0	-	-	-	-	-	-	-	-	-
46	1490181	48	-	-	-	0	-	264	206	175	-	-	-	-	-
47	1545212	74	4.8	2.25	-	0	-	-	-	-	-	-	-	-	NAD
48	35466	15	-	-	-	0	-	-	-	-	0.1	-	-	-	-
49	852628	37	-	-	-	0	-	-	-	-	-	-	-	-	-
50	1430645	27	-	-	-	0	-	-	-	-	-	-	-	-	-
51	1549038	-	-	-	-	0	-	-	-	-	-	-	-	-	-
52	1479477	-	-	-	-	0	-	-	-	-	-	-	-	-	NAD
53	471836	-	-	-	-	0	-	-	-	-	-	-	-	-	GASTRIC ULCER FORREST 3
54	1377271	28	-	-	-	0	-	-	-	-	-	-	-	-	-
55	1289191	-	-	-	-	0	-	-	-	-	-	-	-	-	-
56	1556858	47	-	-	-	0	-	-	-	-	-	-	-	-	-
57	1548733	18	-	-	-	0	-	-	-	-	0.3	-	-	-	PYLORIC RING ULCERATION
58	1515243	23	-	-	-	0	-	200	259	123	-	-	-	-	-
59	1557018	25	-	-	-	0	-	-	-	-	-	-	-	-	-
60	294682	-	-	-	-	0	-	-	-	-	-	-	-	-	-
61	1557040	-	-	-	-	0	-	-	-	-	-	-	-	-	-
62	1300771	27	-	-	-	0	-	-	-	-	160	-	-	-	NAD
63	1561319	-	-	-	-	0	-	-	-	-	-	-	-	-	BARRETT'S
64	924476	-	-	-	-	0	-	-	-	-	-	-	-	-	-
65	1561381	-	-	-	-	0	-	-	-	-	-	-	-	-	-
66	1447098	-	-	-	-	0	-	-	-	-	-	-	-	-	-
67	1559700	-	-	-	-	0	-	-	-	-	0.5	-	-	-	-
68	719509	-	-	-	-	0	-	-	-	-	-	-	-	-	-
69	46860	74	-	-	-	0	-	173	146	97	0.2	NR	NR	NR	-
70	1704681	-	-	-	-	0	-	-	-	-	-	-	-	-	NAD
71	26675	30	81	-	-	0	-	-	-	-	-	-	-	-	DUODENITIS CELIAC
72	1702889	17	81	7.1	4.13	0	-	-	-	-	0.1	-	-	-	HYPERPLASTIC POLYP
73	1701032	39	-	-	-	0	-	-	-	-	160	-	-	-	DUODENITIS ?CELIAC DISEASE
74	1166362	10	53	-	-	0	-	-	-	-	-	-	-	-	-
75	1701195	40	87	-	-	0	-	-	-	-	0.2	-	-	-	NAD
76	1701147	21	89	-	-	0	-	-	-	-	0.2	-	-	-	-
77	1676897	-	-	-	-	0	-	-	-	-	-	-	-	-	NAD
78	1426690	-	-	-	-	0	-	-	-	-	-	NR	NR	-	-
79	1646379	25	-	-	-	0	-	-	-	-	0.2	-	-	-	RUT+
80	1579415	-	-	-	-	0	-	-	-	-	-	-	POSITIVE	-	-

S NO.	MRD NO	GING STUDIES	DYSPEPSIA TYPE	COVID				AGE	GENDER	SCORE	DM	HTN
		ULTRASOUND ABDOMEN		COVID STATUS	VACCINATION	NO. OF VACCINATIONS	NAME OF VACCINE					
41	1547647	NAD	FD	N	Y	NA	NA	64	F	10	N	Y
42	1388733	NAD	FD	N	Y	2	NA	70	F	11	N	Y
43	1544497	FATTTY LIVER GRADE 1	FD	N	Y	2	NA	49	F	12	N	N
44	1548842	FATTY LIVER GRADE 1	FD	N	Y	2	COVAXIN	73	M	10	N	Y
45	1381744	-	FD	N	Y	2	NA	62	M	11	N	N
46	1490181	FATTY LIVER GRADE 1	FD	N	Y	1	NA	62	F	10	Y	N
47	1545212	BILATERAL PCOD	FD	N	Y	1	NA	39	M	10	N	N
48	35466	NAD	FD	N	Y	3	COVISHIELD	32	M	10	N	N
49	852628	NAD	FD	N	Y	1	NA	32	F	10	N	N
50	1430645	-	FD	N	Y	3	COVISHIELD	71	F	10	N	Y
51	1549038	NAD	FD	N	Y	2	NA	46	M	10	N	N
52	1479477	FATTY LIVER GRADE 2	FD	N	Y	1	NA	62	M	10	N	N
53	471836	NAD	PUD	N	Y	2	NA	67	F	10	Y	Y
54	1377271	-	FD	N	Y	1	COVAXIN	46	M	10	N	N
55	1289191	-	FD	Y	N	N	N	45	F	10	N	N
56	1556858	NAD	FD	N	Y	2	COVISHIELD	61	F	10	N	Y
57	1548733	FATTY LIVER GRADE 1	PUD	N	Y	2	COVISHIELD	65	F	11	N	N
58	1515243	FATTY LIVER GRADE 2	FD	N	N	N	N	79	M	10	N	N
59	1557018	MILD FATTY LIVER	FD	N	Y	2	COVISHIELD	56	F	10	N	N
60	294682	-	FD	Y	Y	3	COVISHIELD	56	F	12	N	N
61	1557040	-	FD	N	Y	1	NA	36	F	10	N	N
62	1300771	-	FD	N	Y	2	NA	61	F	12	N	Y
63	1561319	-	BARRETT'S	N	Y	2	NA	27	M	10	N	N
64	924476	GRADE 1 PROSTATOMEGALY	FD	N	Y	3	NA	30	F	10	N	N
65	1561381	-	FD	N	Y	2	COVISHIELD	67	M	10	N	Y
66	1447098	-	FD	N	Y	2	COVISHIELD	59	M	10	N	N
67	1559700	NAD	FD	N	Y	NA	NA	30	M	10	N	N
68	719509	-	FD	N	Y	2	NA	54	M	10	N	N
69	46860	FATTY LIVER SMALL GB POLYP	FD	N	Y	2	COVAXIN	47	M	10	N	N
70	1704681	-	FD	N	Y	2	NA	21	M	10	N	N
71	26675	FATTY LIVER GRADE 1	OD CELIAC	N	Y	2	COVISHIELD	29	M	10	N	N
72	1702889	-	OD GASTRIC POLP	N	Y	2	COVISHIELD	52	F	10	N	N
73	1701032	-	OD CELIAC	N	Y	NA	NA	37	F	11	N	N
74	1166362	NAD	FD	N	Y	2	COVAXIN	36	F	10	N	N
75	1701195	-	FD	N	Y	2	COVISHIELD	79	F	10	N	Y
76	1701147	-	FD	N	Y	NA	NA	40	M	11	N	N
77	1676897	NAD	FD	N	Y	2	COVISHIELD	65	F	10	N	Y
78	1426690	NAD	FD	N	Y	2	COVAXIN	39	M	10	N	N
79	1646379	NAD	OD HP INFECTION	N	Y	3	NA	22	F	10	N	N
80	1579415	-	FD	N	Y	2	NA	40	M	10	N	N

CONTROLS

S NO.	MRD NO	CAD	CKD	OTHERS	ALCOHOL	SMOKING	TOBACCO CHEWING	OPOIDS	OTHER	TYPE		MEALS PER DAY				
										VEG	NON VEG	1	2	3	4	5
41	1547647	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
42	1388733	N	N	RA	N	N	N	N	N	Y	N	N	N	Y	N	N
43	1544497	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
44	1548842	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
45	1381744	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
46	1490181	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
47	1545212	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
48	35466	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
49	852628	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
50	1430645	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
51	1549038	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N
52	1479477	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
53	471836	N	N	HYPOTHYROID	N	N	N	N	N	Y	N	N	N	Y	N	N
54	1377271	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
55	1289191	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
56	1556858	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
57	1548733	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
58	1515243	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
59	1557018	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
60	294682	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
61	1557040	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
62	1300771	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N
63	1561319	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
64	924476	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
65	1561381	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N
66	1447098	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
67	1559700	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
68	719509	N	N	HYPOTHYROID	N	N	N	N	N	Y	N	N	N	Y	N	N
69	46860	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
70	1704681	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
71	26675	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
72	1702889	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
73	1701032	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
74	1166362	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
75	1701195	Y	Y	N	N	N	N	N	N	Y	N	N	Y	N	N	N
76	1701147	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
77	1676897	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
78	1426690	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N
79	1646379	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N
80	1579415	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N

S NO.	MRD NO	DIET AND ACTIVITIY							SELF REPORTED INTOLERANCE		SELF REPORTED FOOD INTOLERANCE
			EATING SPEED			LEVEL OF ACTIVITY			GLUTEN	MILK	
		6	SLOW	MODERATE	FAST	SEDENTARY	MODERATE	HARD			
41	1547647	N	N	Y	N	N	Y	N	N	N	N
42	1388733	N	N	Y	N	N	Y	N	N	N	N
43	1544497	N	Y	N	N	N	Y	N	N	N	N
44	1548842	N	N	Y	N	Y	N	N	N	N	SPICES, OILY FOOD
45	1381744	N	N	Y	N	N	Y	N	N	N	N
46	1490181	N	N	N	Y	N	Y	N	N	N	N
47	1545212	N	N	Y	N	N	Y	N	N	N	N
48	35466	N	N	Y	N	N	Y	N	N	Y	N
49	852628	N	N	Y	N	N	Y	N	Y	N	N
50	1430645	N	N	Y	N	Y	N	N	N	N	N
51	1549038	N	N	Y	N	N	Y	N	N	N	N
52	1479477	N	N	Y	N	N	Y	N	N	N	N
53	471836	N	N	Y	N	N	Y	N	N	N	SPICES
54	1377271	N	N	Y	N	N	Y	N	N	N	N
55	1289191	N	N	Y	N	N	Y	N	N	N	N
56	1556858	N	N	N	Y	Y	Y	N	N	N	N
57	1548733	N	Y	N	N	N	Y	N	N	N	SPICES
58	1515243	N	N	Y	N	N	Y	N	N	N	N
59	1557018	N	N	Y	N	N	Y	N	N	Y	N
60	294682	N	N	Y	N	Y	N	N	N	N	N
61	1557040	N	N	Y	N	N	N	Y	N	N	N
62	1300771	N	Y	N	N	N	Y	N	N	N	N
63	1561319	N	N	Y	N	N	Y	N	N	Y	SPICES
64	924476	N	Y	N	N	N	Y	N	N	N	TEA
65	1561381	N	N	Y	N	N	Y	N	N	N	N
66	1447098	N	N	Y	N	N	Y	N	N	N	N
67	1559700	N	N	Y	N	N	Y	N	N	N	N
68	719509	N	N	Y	N	N	Y	N	N	N	N
69	46860	N	N	Y	N	N	Y	N	N	N	N
70	1704681	N	N	Y	N	N	Y	N	N	N	N
71	26675	N	N	Y	N	N	Y	N	N	N	N
72	1702889	N	N	Y	N	Y	N	N	N	N	N
73	1701032	N	Y	N	N	N	Y	N	N	N	N
74	1166362	N	N	N	Y	N	Y	N	N	N	GARLIC
75	1701195	N	N	Y	N	Y	N	N	N	N	N
76	1701147	N	N	Y	N	N	Y	N	N	N	N
77	1676897	N	N	Y	N	N	Y	N	N	N	TEA
78	1426690	N	N	Y	N	N	Y	N	N	N	N
79	1646379	N	N	Y	N	N	Y	N	N	N	N
80	1579415	N	N	Y	N	Y	N	N	N	N	N

S NO.	MRD NO	DEMOGRAPHICS									CO	
		AGE	GENDER	WEIGHT	HEIGHT	BMI	QUALIFICATION	OCCUPATION	ADDRESS	CONTACT	DIABETES MELLITUS	HYPERTENSION
81	1529637	41	F	65	1.76	20.9839876	3	HOUSEWIFE	BILASPUR RURAL	9876155090	N	N
82	1448174	65	M	71	1.65	26.07897153	12	BUSINESS	LUDHIANA URBAN	9814151902	Y	N
83	1693542	53	M	78	1.8	24.07407407	8	BUSINESS	JAMMU RURAL	9858157727	N	N
84	1692506	24	M	78	1.7	26.98961938	GRADUATE	STUDENT	LUDHIANA URBAN	9149637132	N	N
85	1620330	43	F	64	1.58	25.63691716	12	PVT JOB	AMRITSAR URBAN	9779933307	N	N
86	1692728	35	F	60	1.75	19.59183673	GRADUATE	PVT JOB	BHATINDA RURAL	8146471806	N	N
87	988755	68	M	57	1.63	21.45357371	12	FARMER	FARIDKOT URBAN	9814912422	Y	Y
88	1672582	33	F	58	1.65	21.30394858	GRADUATE	PVT JOB	LUDHIANA URBAN	8872509493	N	N
89	1687719	25	F	61	1.63	22.95908766	GRADUATE	PVT JOB	LUDHIANA URBAN	9815528778	N	N
90	1638091	23	F	65	1.58	26.03749399	GRADUATE	STUDENT	LUDHIANA URBAN	7087325502	N	N
91	1671523	42	F	59	1.64	21.93634741	12	PVT JOB	LUDHIANA URBAN	9796272222	N	N
92	1494895	50	F	55	1.7	19.03114187	GRADUATE	GOVT JOB	MALERKOTLA URBAN	9356145268	N	N
93	1665379	50	F	62	1.64	23.05175491	12	HOUSEWIFE	LUDHIANA URBAN	9781339627	N	N
94	1668501	27	F	67	1.7	23.183391	GRADUATE	PVT JOB	LUDHIANA URBAN	7889384365	N	N
95	1665444	48	F	69	1.73	23.05456246	GRADUATE	HOUSEWIFE	LUDHIANA RURAL	8288898078	N	N
96	1675216	35	M	74	1.55	30.8012487	GRADUATE	PVT JOB	LUDHIANA RURAL	8288912047	N	N
97	1675205	40	F	75	1.64	27.88518739	GRADUATE	PVT JOB	LUDHIANA RURAL	9876294534	N	N
98	1674658	49	M	86	1.67	30.83653053	GRADUATE	BUSINESS	LUDHIANA URBAN	8082618117	N	N
99	1675299	28	M	77	1.76	24.85795455	GRADUATE	BUSINESS	UNA RURAL	8219861568	N	N
100	1674200	51	M	68	1.61	26.2335558	12	BUSINESS	JAMMU URBAN	7006908219	N	Y

S NO.	MRD NO	MORBIDITIES				SUBSTANCE ABUSE					DIET AND ACTIVITIY										
		CAD	CKD	THYROID DS	OTHER	ALCOHOL	SMOKING	TOBACCO CHEWING	OPOIDS	OTHER	TYPE		MEALS PER DAY						EATING SPEED		
											VEG	NON VEG	1	2	3	4	5	6	SLOW	MODERATE	FAST
81	1529637	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
82	1448174	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
83	1693542	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
84	1692506	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	Y	N	N
85	1620330	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
86	1692728	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	Y	N	N
87	988755	Y	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
88	1672582	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
89	1687719	N	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N
90	1638091	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
91	1671523	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
92	1494895	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	N	Y	N
93	1665379	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N
94	1668501	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	Y	Y	N	N
95	1665444	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
96	1675216	N	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N
97	1675205	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
98	1674658	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N	N	Y	N	Y
99	1675299	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
100	1674200	N	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	Y	N

S NO.	MRD NO	LEVEL OF ACTIVITY			ALARM SYMPTOMS					
		SEDENTARY	MODERATE	HARD	AGE >60	ANEMIA	GI BLEED	PROGESSIVE DYSPHAGIA	PERSISTENT VOMITING	UNINTENTIONAL WEIGHT LOSS
81	1529637	Y	N	N	N	N	N	N	N	N
82	1448174	Y	N	N	Y	N	N	N	N	N
83	1693542	Y	N	N	N	N	N	N	N	N
84	1692506	Y	N	N	N	N	N	N	N	N
85	1620330	N	Y	N	N	N	N	N	N	N
86	1692728	Y	N	N	N	N	N	N	N	N
87	988755	Y	N	N	Y	N	N	N	N	N
88	1672582	N	N	Y	N	N	N	N	N	N
89	1687719	Y	N	N	N	N	N	N	N	N
90	1638091	Y	N	N	N	N	N	N	N	N
91	1671523	N	Y	N	N	N	N	N	N	N
92	1494895	Y	N	N	N	N	N	N	N	N
93	1665379	Y	N	N	N	N	N	N	N	N
94	1668501	Y	N	N	N	N	N	N	N	N
95	1665444	Y	N	N	N	N	N	N	N	N
96	1675216	Y	N	N	N	N	N	N	N	N
97	1675205	Y	N	N	N	N	N	N	N	N
98	1674658	Y	N	N	N	N	N	N	N	N
99	1675299	Y	N	N	N	N	N	N	N	N
100	1674200	Y	N	N	N	N	N	N	N	N

S NO.	MRD NO			SELF REPORTED INTOLERANCE		SELF REPORTED FOOD INTOLERANCE		
		FAMILY HISTORY OF MALIGNANCY/PALPABLE LUMP	HISTORY OF NSAID INTAKE	GLUTEN	MILK		EPIGASTRIC PA	
							FREQUENCY	INTENSITY
81	1529637	N	N	N	N	SPICES	0	0
82	1448174	N	N	N	N	N	0	0
83	1693542	N	N	N	N	N	0	0
84	1692506	N	N	Y	N	N	1	1
85	1620330	N	N	N	N	SPICES	1	1
86	1692728	N	N	N	N	POTATO	0	0
87	988755	N	Y	N	N	SPICES	1	1
88	1672582	N	N	N	N	OILY FOOD	1	1
89	1687719	N	N	N	N	N	0	0
90	1638091	N	N	N	N	N	1	1
91	1671523	N	N	N	N	N	0	0
92	1494895	N	N	N	N	SPICES, OILY	4	3
93	1665379	N	N	N	N	N	1	1
94	1668501	N	N	N	N	N	0	0
95	1665444	N	N	N	N	N	0	0
96	1675216	N	N	N	N	N	0	0
97	1675205	N	N	N	N	TEA	1	1
98	1674658	N	N	N	N	N	0	0
99	1675299	N	N	N	N	N	1	1
100	1674200	N	N	N	N	SPICES	0	0

S NO.	MRD NO	CARDINAL SYMPTOMS										
		AIN/ACHE	EPIGASTRIC BURNING			EARLY SATIETY			POST PRANDIAL FULLNESS			
		BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY
81	1529637	0	0	0	0	0	0	0	1	1	1	0
82	1448174	0	1	1	1	0	0	0	0	0	0	0
83	1693542	0	0	0	0	2	2	2	0	0	0	0
84	1692506	1	1	1	1	0	0	0	0	0	0	0
85	1620330	1	1	1	1	0	0	0	0	0	0	0
86	1692728	0	1	1	1	0	0	0	0	0	0	0
87	988755	1	1	1	1	0	0	0	0	0	0	0
88	1672582	1	0	0	0	0	0	0	1	1	1	0
89	1687719	0	0	0	0	2	1	2	0	0	0	4
90	1638091	1	2	3	2	0	0	0	0	0	0	0
91	1671523	0	0	0	0	2	2	2	0	0	0	0
92	1494895	3	2	2	2	0	0	0	0	0	0	4
93	1665379	1	1	1	1	0	0	0	0	0	0	1
94	1668501	0	2	3	3	1	1	1	0	0	0	0
95	1665444	0	0	0	0	0	0	0	0	0	0	0
96	1675216	0	2	2	1	1	1	1	0	0	0	1
97	1675205	1	0	0	0	0	0	0	0	0	0	0
98	1674658	0	2	2	2	0	0	0	0	0	0	0
99	1675299	1	0	0	0	0	0	0	0	0	0	0
100	1674200	0	0	0	0	2	2	2	0	0	0	0

S NO.	MRD NO	SYMP									
		UPPER ABDOMEN DISCOMFORT		BURNING SENSATION IN CHEST			UPPER ABDOMEN CRAMPS			PAIN /ACHE IN CHEST	
		INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY
81	1529637	0	0	0	0	0	0	0	0	0	0
82	1448174	0	0	1	1	1	0	0	0	0	0
83	1693542	0	0	0	0	0	0	0	0	0	0
84	1692506	0	0	0	0	0	0	0	0	0	0
85	1620330	0	0	0	0	0	0	0	0	0	0
86	1692728	0	0	0	0	0	0	0	0	0	0
87	988755	0	0	0	0	0	0	0	0	0	0
88	1672582	0	0	0	0	0	0	0	0	0	0
89	1687719	3	2	0	0	0	0	0	0	0	0
90	1638091	0	0	0	0	0	0	0	0	0	0
91	1671523	0	0	0	0	0	0	0	0	0	0
92	1494895	3	3	0	0	0	0	0	0	0	0
93	1665379	1	1	0	0	0	0	0	0	0	0
94	1668501	0	0	0	0	0	0	0	0	0	0
95	1665444	0	0	0	0	0	0	0	0	0	0
96	1675216	1	1	0	0	0	0	0	0	0	0
97	1675205	0	0	0	0	0	0	0	0	0	0
98	1674658	0	0	0	0	0	0	0	0	0	0
99	1675299	0	0	0	0	0	0	0	0	0	0
100	1674200	0	0	0	0	0	0	0	0	0	0

CLINICAL HISTORY

TOMS

S NO.	MRD NO	OTHERS										
			BITTER/SOUR TASTING FLUID IN THROAT/MOUTH			BLOATING/PRESSURE IN UPPER ABDOMEN			NAUSEA			
		BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUIENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS	FREQUENCY
81	1529637	0	0	0	0	2	2	2	0	0	0	0
82	1448174	0	0	0	0	2	2	2	0	0	0	1
83	1693542	0	0	0	0	1	1	1	0	0	0	0
84	1692506	0	0	0	0	1	1	1	0	0	0	2
85	1620330	0	0	0	0	0	0	0	0	0	0	1
86	1692728	0	0	0	0	1	1	1	1	1	1	1
87	988755	0	0	0	0	0	0	0	1	1	1	1
88	1672582	0	0	0	0	0	0	0	0	0	0	1
89	1687719	0	0	0	0	2	1	1	0	0	0	0
90	1638091	0	0	0	0	0	0	0	0	0	0	0
91	1671523	0	0	0	0	2	2	2	0	0	0	1
92	1494895	0	0	0	0	1	1	1	0	0	0	0
93	1665379	0	0	0	0	1	1	1	0	0	0	0
94	1668501	0	0	0	0	2	2	1	0	0	0	1
95	1665444	0	1	1	1	1	1	1	0	0	0	0
96	1675216	0	0	0	0	0	0	0	0	0	0	0
97	1675205	0	0	0	0	0	0	0	0	0	0	0
98	1674658	0	0	0	0	0	0	0	0	0	0	0
99	1675299	0	0	0	0	0	0	0	0	0	0	0
100	1674200	0	0	0	0	0	0	0	0	0	0	0

S NO.	MRD NO										
										DURATION	
		BURPING/BELCHING		VOMITING			BAD BREATH			WEEKS	MONTHS
		INTENSITY	BOTHERSOMENESS	FREQEUNCY	INTENSITY	BOTHERSOMENESS	FREQUENCY	INTENSITY	BOTHERSOMENESS		
81	1529637	0	0	1	1	1	0	0	0	-	-
82	1448174	1	1	0	0	0	0	0	0	-	-
83	1693542	0	0	0	0	0	2	1	1	-	-
84	1692506	2	2	0	0	0	0	0	0	-	6
85	1620330	1	1	0	0	0	0	0	0	-	-
86	1692728	1	1	0	0	0	0	0	0	-	-
87	988755	1	1	0	0	0	0	0	0	-	-
88	1672582	1	1	0	0	0	0	0	0	-	-
89	1687719	0	0	0	0	0	0	0	0	-	-
90	1638091	0	0	0	0	0	0	0	0	-	-
91	1671523	1	1	0	0	0	0	0	0	-	-
92	1494895	0	0	0	0	0	0	0	0	-	-
93	1665379	0	0	0	0	0	0	0	0	-	-
94	1668501	1	1	0	0	0	0	0	0	-	-
95	1665444	0	0	0	0	0	0	0	0	-	-
96	1675216	0	0	0	0	0	0	0	0	-	6
97	1675205	0	0	0	0	0	0	0	0	-	-
98	1674658	0	0	0	0	0	0	0	0	-	-
99	1675299	0	0	0	0	0	0	0	0	-	-
100	1674200	0	0	0	0	0	0	0	0	-	-

S NO.	MRD NO		MEDICATIONS INTAKE				
		YEARS	PPI	H2RA	PROKINETICS	CENTRAL NEUROMODULATOR	OTHERS
81	1529637	2	Y	N	N	N	N
82	1448174	5	Y	N	N	N	N
83	1693542	10	Y	N	N	N	N
84	1692506	-	Y	N	Y	N	NSAID
85	1620330	1	Y	N	Y	N	N
86	1692728	1	N	Y	N	Y	N
87	988755	4	Y	N	N	N	NSAID, METFORMIN, TELMISARTAN
88	1672582	1	Y	N	N	N	N
89	1687719	1	Y	N	N	Y	N
90	1638091	8	Y	N	N	N	N
91	1671523	5	N	N	N	Y	N
92	1494895	5	Y	N	N	N	N
93	1665379	1	Y	N	N	N	N
94	1668501	1	Y	N	Y	N	N
95	1665444	1	Y	N	N	N	N
96	1675216	-	N	Y	N	N	N
97	1675205	5	N	N	N	Y	PROBIOTIC
98	1674658	2	Y	N	N	N	N
99	1675299	1	Y	N	N	N	N
100	1674200	1	Y	N	N	N	N

S NO.	MRD NO					
		TENSION		INTERFERENCE WITH DAILY ACTIVITIES		EAT
		GENERAL EMOTIONAL WELL BEING DISTURBANCE	IRRITABLE,TENSE OR FRUSTRATED	FUN ACTIVITIES DISTURBANCE	DECREASE IN ENJOYMENT	DECREASE IN ABILITY TO EAT OR DRINK
81	1529637	1	1	1	1	1
82	1448174	1	1	1	1	1
83	1693542	1	1	1	1	1
84	1692506	2	2	1	1	2
85	1620330	2	2	2	2	1
86	1692728	2	2	2	2	1
87	988755	2	2	1	1	1
88	1672582	2	2	2	2	2
89	1687719	2	2	1	1	1
90	1638091	1	1	1	1	3
91	1671523	2	2	1	1	2
92	1494895	1	1	1	1	2
93	1665379	1	1	1	1	1
94	1668501	1	1	1	1	2
95	1665444	1	1	1	1	2
96	1675216	2	2	2	2	1
97	1675205	1	1	2	2	2
98	1674658	2	2	1	1	2
99	1675299	1	1	1	1	1
100	1674200	2	2	1	1	1

S NO.	MRD NO	QUESTIONNARIE			
		SHORT FORM NEPEAN DYSPEPSIA INDEX(SF-NDI)			
		NG/DRINKING	KNOWLEDGE & CONTROL		WORK/S
		DECREASE IN ENJOYMENT OF EATING & DRINKING	WONDERED PERSISTENCE OF PROBLEM	THOUGHT OF SERIOUS ILLNESS	DISTURBED ABILITY TO WORK OR STUDY
81	1529637	1	1	1	1
82	1448174	1	1	1	1
83	1693542	1	1	1	1
84	1692506	2	1	1	1
85	1620330	1	1	1	1
86	1692728	1	1	1	1
87	988755	1	1	1	1
88	1672582	2	2	2	2
89	1687719	1	1	1	1
90	1638091	2	1	1	1
91	1671523	2	1	1	1
92	1494895	2	1	1	1
93	1665379	1	2	2	2
94	1668501	2	2	2	1
95	1665444	2	1	1	1
96	1675216	1	1	1	1
97	1675205	2	1	2	1
98	1674658	2	1	1	1
99	1675299	1	1	1	1
100	1674200	1	1	1	1

S NO.	MRD NO	TUDY	TOTAL VALUE	PATHOLOGY												
		DISTURBANCE IN ENJOYMENT OF WORK & STUDY		HB	TLC	DLC	PLATELETS	ESR	TSH	UREA	CREATININE	Na	K	BILI(T)	BILIRUBIN (D)	SGOT
81	1529637	1	10	9.9	5.4	0	243	0	-	-	0.52	-	-	-	-	19
82	1448174	1	10	11.8	6.02	0	152	0	-	-	-	-	-	0.7	-	36
83	1693542	1	10	10.9	5.6	0	422	0	-	-	0.39	-	-	-	-	36
84	1692506	1	14	15.2	6.2	0	126	0	2.9	-	0.8	-	-	-	-	37
85	1620330	1	14	11	5.9	0	200	0	-	-	0.66	-	-	-	-	21
86	1692728	1	14	13.1	9.3	0	384	0	-	-	0.71	-	-	-	-	20
87	988755	1	12	7.6	11.1	0	319	0	-	76	1.9	-	-	-	-	-
88	1672582	2	20	11.5	8.1	0	264	0	-	-	0.69	-	-	-	-	12
89	1687719	1	12	14.9	9	0	280	0	-	-	-	-	-	-	-	22
90	1638091	1	13	-	-	0	-	0	-	-	-	-	-	-	-	-
91	1671523	1	14	10.8	5.8	0	180	0	6.07	-	0.84	-	-	-	-	27
92	1494895	1	12	7.5	3.4	0	294	0	-	37	0.76	140	4.11	-	-	19
93	1665379	2	14	-	-	0	-	0	-	-	-	-	-	-	-	-
94	1668501	1	14	11.4	10.3	0	208	0	-	-	-	-	-	-	-	13
95	1665444	1	12	12.9	5.7	0	193	0	-	-	-	-	-	-	-	-
96	1675216	1	14	16.1	7.6	0	267	0	-	-	-	-	-	-	-	31
97	1675205	1	15	-	-	0	-	0	-	-	-	-	-	-	-	-
98	1674658	1	14	9.3	8	0	283	0	-	-	1.01	-	-	-	-	46
99	1675299	1	10	16.7	6.1	0	262	0	0.8	-	0.8	-	-	-	-	20
100	1674200	1	12	7.4	7.9	0	400	0	-	-	0.55	-	-	-	-	18

S NO.	MRD NO	INVESTIGATIONS													
		BLOOD SAMPLES													IMA(
		BIOCHEMISTRY									MICROBIOLOGY				
		SGPT	ALP	PROTEIN	ALBUMIN	AMYLASE	LIPASE	CHOLESTROL	TRIGLYCERIDE	LDL	ANTI-TTG	HBsAg	ANTI-HCV	ANTI-HIV	ENDOSCOPY
81	1529637	12	-	-	-	0	-	-	-	-	0.2	NR	NR	NR	-
82	1448174	31	-	-	-	0	-	-	-	-	-	-	-	-	DUODENITIS CELIAC
83	1693542	56	-	-	-	0	-	-	-	-	2.4	NR	NR	NR	-
84	1692506	121	94	-	-	0	-	-	-	-	-	NR	NR	-	-
85	1620330	19	-	-	-	0	-	-	-	-	-	NR	NR	NR	-
86	1692728	30	61	-	-	0	-	-	-	-	-	NR	NR	NR	-
87	988755	-	-	-	-	0	-	-	-	-	-	NR	NR	NR	NAD
88	1672582	10	67	-	-	0	-	-	-	-	-	-	-	-	NAD
89	1687719	25	88	-	-	0	-	-	-	-	67	-	-	-	CELIAC DISEASE
90	1638091	-	-	-	-	0	-	-	-	-	-	-	-	-	-
91	1671523	21	-	-	-	0	-	-	-	-	0.3	-	-	-	-
92	1494895	17	37	6.4	4.1	0	-	-	-	-	0.3	NR	NR	NR	NAD
93	1665379	-	-	-	-	0	-	-	-	-	0.2	-	-	-	NAD
94	1668501	20	60	-	-	0	-	-	-	-	-	-	-	-	NAD
95	1665444	-	-	-	-	0	-	-	-	-	10	-	-	-	-
96	1675216	44	79	-	-	0	-	-	-	-	1.2	-	-	-	NAD
97	1675205	-	-	-	-	0	-	-	-	-	0.5	-	-	-	GASTRITIS
98	1674658	34	95	-	-	0	-	-	-	-	-	-	-	-	-
99	1675299	15	-	-	-	0	-	-	-	-	-	-	-	-	-
100	1674200	38	-	-	-	0	-	-	-	-	0.7	-	-	-	-

S NO.	MRD NO	GING STUDIES	DYSPEPSIA TYPE	COVID				AGE	GENDER	SCORE	DM	HTN
		ULTRASOUND ABDOMEN		COVID STATUS	VACCINATION	NO. OF VACCINATIONS	NAME OF VACCINE					
81	1529637	UTERINE FIBROID	FD	N	Y	2	COVISHIELD	29	M	10	N	N
82	1448174	-	OD CELIAC	N	Y	NA	NA	55	F	10	N	N
83	1693542	-	FD	N	Y	2	NA	49	M	10	N	N
84	1692506	FATTY LIVER GRADE 2 CHOLELITHIASIS	OD CHOLELITHAISIS	N	Y	2	COVISHIELD	37	M	10	N	N
85	1620330	CHOLELITHIASIS	OD CHOLELITHIASIS	N	Y	NA	NA	43	M	10	N	N
86	1692728	NAD	FD	N	Y	2	COVISHIELD	63	M	10	N	Y
87	988755	-	FD	N	Y	2	COVAXIN	62	F	10	Y	N
88	1672582	-	FD	N	Y	2	NA	44	M	10	N	N
89	1687719	-	OD CELIAC	N	Y	2	COVISHIELD	27	M	12	N	N
90	1638091	NAD	FD	N	Y	2	NA	31	M	10	N	N
91	1671523	NAD	FD	N	Y	2	NA	63	F	10	N	Y
92	1494895	ECTOPIC RIGHT KIDNEY	FD	N	Y	3	NA	36	M	10	N	N
93	1665379	NAD	FD	N	Y	2	COVISHIELD	75	F	13	N	Y
94	1668501	-	FD	N	Y	2	COVAXINN	60	M	10	N	Y
95	1665444	-	FD	N	Y	2	NA	35	F	10	N	N
96	1675216	-	FD	N	Y	3	NA	35	M	10	N	N
97	1675205	NAD	OD GASTRITIS	N	Y	2	COVISHIELD	40	M	10	N	N
98	1674658	-	FD	N	Y	2	COVISHIELD	57	F	10	N	N
99	1675299	NAD	FD	N	Y	2	NA	69	M	10	Y	Y
100	1674200	NAD	FD	N	Y	2	COVISHIELD	46	F	10	N	N

CONTROLS

S NO.	MRD NO	CAD	CKD	OTHERS	ALCOHOL	SMOKING	TOBACCO CHEWING	OPOIDS	OTHER	TYPE		MEALS PER DAY				
										VEG	NON VEG	1	2	3	4	5
81	1529637	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
82	1448174	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
83	1693542	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
84	1692506	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
85	1620330	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
86	1692728	Y	N	COPD	N	N	N	N	N	N	Y	N	Y	N	N	N
87	988755	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
88	1672582	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
89	1687719	N	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N
90	1638091	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N
91	1671523	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
92	1494895	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
93	1665379	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
94	1668501	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
95	1665444	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
96	1675216	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N
97	1675205	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
98	1674658	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	N
99	1675299	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N
100	1674200	N	N	N	N	N	N	N	N	Y	N	N	N	Y	N	N

S NO.	MRD NO	DIET AND ACTIVITIY							SELF REPORTED INTOLERANCE		SELF REPORTED FOOD INTOLERANCE
			EATING SPEED			LEVEL OF ACTIVITY			GLUTEN	MILK	
		6	SLOW	MODERATE	FAST	SEDENTARY	MODERATE	HARD			
81	1529637	N	Y	N	N	Y	N	N	N	N	N
82	1448174	N	N	N	Y	N	Y	N	N	N	N
83	1693542	N	N	Y	N	Y	N	N	N	N	GINGER
84	1692506	N	N	Y	N	Y	N	N	N	N	N
85	1620330	N	N	Y	N	Y	N	N	N	N	N
86	1692728	N	N	Y	N	Y	N	N	N	N	N
87	988755	N	N	Y	N	Y	N	N	N	N	N
88	1672582	N	N	Y	N	Y	N	N	N	N	N
89	1687719	N	N	Y	N	Y	N	N	N	N	N
90	1638091	N	N	Y	N	Y	N	N	N	N	CURY
91	1671523	N	N	Y	N	Y	N	N	N	N	N
92	1494895	N	N	Y	N	N	Y	N	N	N	N
93	1665379	N	N	Y	N	Y	N	N	N	N	N
94	1668501	N	Y	N	N	Y	N	N	N	N	N
95	1665444	N	N	Y	N	Y	N	N	N	N	N
96	1675216	N	N	Y	N	Y	N	N	N	N	SPICES
97	1675205	N	N	N	Y	N	Y	N	N	N	N
98	1674658	N	N	Y	N	Y	N	N	N	N	N
99	1675299	N	N	N	Y	Y	N	N	N	N	N
100	1674200	N	N	Y	N	Y	N	N	N	N	N

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The Principal
Dayanand Medical College & Hospital
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Subject:: Approval of Plan of Thesis.

This is to inform you that the Faculty of Medical Sciences in its meeting held on 25.09.2023 has approved the plan of thesis of **Gurpreet Singh**, a student of your college for **MD General Medicine** along with the names of Supervisor/Co-Supervisor as under:-

Topic Plan of Thesis
Clinical profile, risk factors and quality of life of patients with dyspepsia .

Supervisor	Co-Supervisor:-	Co-Supervisor:-
Dr. Narender Pal Jain	Dr. Omesh Goyal	Dr. S[illegible]deep Chhabra
Professor	Professor	Assoc. Professor
Dept. of Medicine	Dept. of Gastroenterology	Dept. of Medicine

The student may submit the thesis in triplicate alongwith the plan in triplicate also, to the Controller of Examinations, BFUHS, Faridkot, at least six months before the commencement of theory examination, if he/she is otherwise eligible to take the examination. He /She may be directed to attach a photocopy of this letter with the forwarding letter while submitting thesis in the University along with the letter of approval of University for change of supervisor/Co-Supervisor, change of topic, if any.

Controller of Examinations

Note :

1. *If any discrepancy found regarding topic of thesis or Supervisor/Co-Supervisor, inform undersigned within one month after issue of this letter.*

CLINICAL PROFILE, RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA

THESIS PROPOSAL

FOR APPROVAL OF SUBJECT OF THESIS TO BE SUBMITTED IN

PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF MEDICINE

IN

GENERAL MEDICINE

OF THE

BABA FARID UNIVERSITY OF HEALTH SCIENCES

FARIDKOT

AUGUST, 2022

DR. GURPREET SINGH

DEPARTMENT OF GENERAL MEDICINE
DAYANAND MEDICAL COLLEGE AND HOSPITAL
LUDHIANA

ABSTRACT OF PLAN OF THESIS

Title	CLINICAL PROFILE,RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA
For the degree of	MD General Medicine
Name of the candidate	Dr. Gurpreet Singh
Supervisor	Dr. Narender Pal Jain
Co-supervisor	Dr. Omesh Goyal Dr. Sandeep Chhabra
Institution	Dayanand Medical College & Hospital, Ludhiana
University	Baba Farid University of Health Sciences, Faridkot

Introduction: Dyspepsia refers to a constellation of upper abdominal symptoms consisting of epigastricpain,burning,fullness,discomfort,early satiety,nausea,vomiting etc.Dyspepsia is a common problem throughout the world.Various factors like age,gender ,systemic ilness, gastrointestinal infections,stress,dietary,habits,medicati ons etc affect epidemiology of dyspepsia.When a patient presents with these symptoms for the first time before any investigations are done,it is called uninvestigated dyspepsia(UD).Functional Dyspepsia (FD) is diagnosed if UGIE doesn't show any structural abnormality explaining these symptoms.FD is of two types namely postprandial distress syndrome(PPDS) and epigastric pain syndrome(EPS).Dyspepsia can cause physical, mental, and social distress that can affect a patient's quality of life.Data regarding various aspects related to dyspepsia is scarce & heterogeneous .Hence more studies are needed to provide depth to various aspects.

Aim of Study:1) To study the clinical profile & risk factors of subtypes of dyspepsia.
2) To study the quality of life of patients and compare it with the control population.

Materials & methods: This is a prospective observational study based upon Questionnaire to know the clinical profile and various risk factors of dyspepsia. Short form nepean dyspepsia index (SF-NDI) will be used to assess quality of life.

Clinical Significance: Studies like these will help us to formulate the preventive strategies for the at risk population and reduce disease burden. Assessment of quality of life can help us to know the impact of disease on physical, mental and social level. These findings can be instrumental to finds ways of improving quality of life of patient, reduce treatment cost and reduce healthcare burden of the disease.

Keywords: Dyspepsia, Organic dyspepsia, Functional dyspepsia, prospective study, risk factors, clinical profile, prevalence, subtypes, age, gender, dietary, gi infections.

(Signature) Candidate | (Signature) Co-supervisor | (Signature) Co-supervisor | (Signature) Supervisor | (Signature) Principal

CERTIFICATE OF FACILITIES AVAILABLE

This is to certify that the facilities for work on the subject of thesis titled **"CLINICAL PROFILE,RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA"** exist in the Department of General medicine at Dayanand Medical College and Hospital, Ludhiana and will be provided to the candidate. We will see that the data being included in the thesis are genuine and is collected by the candidate himself under our supervision and guidance.

Supervisor

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Professor,
Department of Medicine,
DMCH, Ludhiana

Co-Supervisor

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DMCH, Ludhiana

Dr. Sandeep Chhabra
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Head of the Department

Dr. Dinesh Gupta
Head of the Department
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Place : _____

Date : _____

APPROVAL PROFORMA
BY RESEARCH & ETHICAL COMMITTEE
DAYANAND MEDICAL COLLEGE & HOSPITAL, LUDHIANA

Name of candidate	Dr. Gurpreet Singh
Department	General Medicine
Topic of Thesis	Clinical profile,risk factors and quality of life of patients with dyspepsia
Likely date of appearing in PG examination	May/June, 2024
Date of enrollment	7th March, 2022
Name of Head of Department	Dr. Dinesh Gupta
1) Supervisor **2) Co-Supervisor**	Dr. Narender Pal Jain Dr. Omesh Goyal Dr. Sandeep Chhabra
Signature of Members of Research Committee with Stamp	**Signature of Members of Ethics Committee with Stamp**
Dr. Harpreet Kaur (Professor & Head, Pathology)	Mr. R K Sharma (Legal Expert)
Dr. Jaspal Singh (Professor & Head, Surgery)	Dr. Ramit Mahajan (Associate Professor, Gastroenterology)
Dr. Dinesh Gupta (Professor & Head, Medicine)	Dr. Anu Sharma (Professor, Anatomy)
Dr. Sandeep Kaushal (Dean Academics & Professor & Head, Pharmacology)	Dr. Sandeep Kaushal (Dean Academics & Professor & Head, Pharmacology)
Dr. Gurpreet S Wander (Vice Principal)	Dr. Gurpreet S Wander (Vice Principal & Professor & Head, Cardiology)
	Dr. Gagandeep Singh (Secretary, Ethics Committee Professor & Head, Neurology)

Approved: Yes / ~~No~~

Dr. Sandeep Puri
Chairperson
Research Committee
Chairperson
Research Committee

Approved: Yes / ~~No~~

Prof. Arvind Malhotra
Chairperson
Ethics Committee
Chairperson
Ethics Committee

BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

PROFORMA FOR REGISTRATION OF SUBJECT FOR DISSERTATION

1.	NAME OF THE CANDIDATE AND ADDRESS	DR. GURPREET SINGH HOUSE NO.531, STREET NO.3 WEST ENCLAVE, HOSHIARPUR PUNJAB, 146001.
2.	NAME OF THE INSTITUTE	DAYANAND MEDICAL COLLEGE AND HOSPITAL, LUDHIANA
3.	COURSE OF STUDY AND SUBJECT	M.D. GENERAL MEDICINE
4.	DATE OF ADMISSION OF COURSE	7 MARCH, 2022
5.	TITLE OF THE TOPIC	CLINICAL PROFILE, RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA

6. BRIEF RESUME OF THE INTENDED WORK

6.1 NEED FOR THE STUDY

Dyspepsia is a common problem throught the world. It roughly affects about 1/3rd of the population. Prevalence of dyspepsia varies considerably between different populations. It varies from east to west and also among different nations of same continent. There is difference in frequency of subtypes with age as well as gender difference. There is heterogeneity in various studies related to demographic profile, risk factors and predilections for organic dyspepsia (OD) and functional dyspepsia (FD).Limited studies in Asian countries used different criteria and cultural differences in reporting of symptoms raises questions on findings. Different studies have revealed different risk factors associated with dyspepsia and level of association also varies. Indian data on risk factors is very scarce and limited.

There is significant impact on quality of life(QoL) in different domains in patients with dyspepsia in different dimensions of pain, usual activities , anxiety/depression, mobility ,self care etc. There is paucity of data on QoL assessment and various other aspects related to dyspepsia.

Studies like these will help us to know the frequency of different types of dyspepsia, avoidable risk factors, at risk population which can help to establish early diagnosis and accordingly early interventional steps can be taken. It can help to formulate the preventive strategies for the at risk population and reduce disease burden. Assessment of quality of life in different domains will be made which can help us to know the impact of disease on physical, mental and social level. These findings can be instrumental to finds ways of improving quality of life of patient, reduce treatment cost and reduce healthcare burden of the disease.
In era of corona virus disease, covid status and its association with

Dyspepsia remains unexplored. Data on covid status and Dyspepsia may reveal some findings.

6.2 REVIEW OF LITERATURE

Dyspepsia is derived from the Greek words dys & pepse and literally means “difficult digestion.”In modern era its meaning has changed and is refers to the abdominal symptoms which include epigastric pain, burning, fullness, discomfort, early satiety, nausea and vomiting. The term univestigated dyspepsia(UD) refers to dyspeptic symptoms in persons in whom diagnostic investigations have not yet been performed and in whom a specific diagnosis that explains the dyspeptic symptoms has not been determined. There can be organic causes of dyspepsia which can be evaluated with history, examination and investigations.

According to the Rome IV criteria, Functional Dyspepsia (FD) is defined as the presence of early satiation, postprandial fullness, epigastric pain, epigastric burning in the absence of organic, systemic, or metabolic disease that is likely to explain the symptoms. FD is further divided into two types, namely epigastric pain syndrome (EPS) and postprandial distress syndrome (PDS). EPS refers to epigastric pain and burning sensations. PDS refers to post prandial fullness and early satiety symptoms. More than two third cases of UD are of FD type. There are various alarm symptoms which when present warrant an upper gastro intestinal endoscopy. These are namely- Age more than 60 years, anemia, GI bleed , progressive dysphagia , persistent vomiting , unintentional weight loss , family history of gastric cancer , palpable lump and history of non steroidal anti-inflammtory drugs.

Dyspepsia is a common problem throughout the globe.Prevelance of UD varies in different parts of world and also varies according to criteria used to define it.Arvind Kumar et al studied the prevalence of dyspepsia which varies considerably between different populations.In studies using “upper abdominal pain” as the definition, the prevalence of uninvestigated dyspepsia (UD) has varied between 7%-34.2%.[1]

With this definition, the lowest UD prevalence of 7%-8% is seen in Singapore, South East Asia.[2] Slightly higher rates are seen amongst the Scandinavians (14.5%)[3] with 30.4% population in India[4] and New Zealand (34.2%)[5] having the highest rates. Prevalence of dyspepsia found to be 23%-45% when definition included “upper gastrointestinal symptoms.” Using this definition, a lower prevalence is seen in Spain (23.9%)[6] A 32% UD prevalence rate in the US is noted.[7] Whilst significantly higher rate of 38% is noted in the UK[8] and 45% in Nigeria.[9]

Though the data on UD in general and FD in particular are somewhat scanty from Asia, quite a few studies from Asian countries explored the epidemiology of these conditions.Uday C Ghoshal et al reviewed data on frequency of uninvestigated dyspepsia (UD) and functional dyspepsia (FD) in asia.Frequency of UD and FD varied between 8%-30% and 8%-23%,respectively in Asia.[10]Frequency of UD in a cross-sectional community study from Singapore was 7.9%.[11]In a study from Hong Kong,18.4%[12] had dyspepsia using Rome I criteria.In another cross-sectional study from Hong kong using Rome II criteria prevelance was found to be 14.6%[13] In a population-based study from China,23.5%[14] had dyspepsia using Rome II criteria.Data on UD and FD from India are scanty. In a community study from Mumbai city, 30.4% had dyspepsia defined as epigastric pain or discomfort.[15] Unfortunately, the community studies available from Asian countries used different criteria to diagnose UD. Hence, it is difficult to conclude whether the difference in prevalence of dyspepsia shown in these studies truly reflect difference in frequency of this condition in different countries or is related to criteria used to diagnose the condition.

There are various risk factors associated with dyspepsia. Different studies found different risk factor and variablity of association of factor was noted .In one study ,the prevalence was higher in women, smokers, non-

steroidal anti-inflammatory drug (NSAID) users) and Helicobacter pylori-positive individuals.[16] In another study independent predictors for FGIDs were female gender, medical student, non-vegetarian diet, junk food, tea/coffee, poor physical activity, anxiety, and insomnia.[17]
A survey in northern India found that older age, non-Hindu religion, lower education, lower socioeconomic class and lower income, non-vegetarian diet, intake of tea/coffee, carbonated soft drinks and alcohol, tobacco, and smoking were associated with GERD and Dyspepsia.[18]Study on healthy adults in mumbai using a detailed symptom questionnaire found dyspepsia was more prevalent in subjects who abused tobacco and alcohol.[19] Dyspepsia is also linked with gastrointestinal infections. Association of H. pylori infection was positive in 83.3% of patients with endoscopic abnormalities causing dyspepsia.[20]

Dyspepsia has impact on physical, mental and social status of the patients. In the dyspeptic patients, impairment in HRQoL was commonly seen in the domains of pain, usual activities, and anxiety/depression, however, much less with mobility and self-care).[21]Any impairment in HRQoL was not significantly different between the different subtypes of dyspepsia in the domains of mobility and usual activities. Patients with functional dyspepsia (FD) have poor health-related quality of life (HRQOL), but Indian data are lacking.
The Nepean Dyspepsia Index (NDI) has been in widespread use since its publication in 1999 and the addition of a short form in 2001. The NDI was one of the first disease-specific quality-of-life instruments created for functional dyspepsia (FD). Goyal et al developed and validated a reliable translation of Short-Form Nepean Dyspepsia Index (SF-NDI) in Hindi to assess the impact of FD on HRQOL in Indian patients. This tool can be useful in future epidemiological and clinical studies. Indian FD patients have poor HRQOL, being worse in those with severe dyspepsia and longer duration of symptoms.[22]

With emergency of covid pandemic across the globe, the impact of covid on patients with dyspepsia is still unexplored. Because acute infectious gastroenteritis may cause post-infection irritable bowel syndrome and functional dyspepsia and the severe acute respiratory syndrome coronavirus-2 affects gastrointestinal (GI) tract, coronavirus disease-19 (COVID-19) may cause post-infection-functional GI disorders (FGIDs).

6.3 AIMS AND OBJECTIVES OF THE STUDY

1. To study the clinical profile & risk factors of subtypes of dyspepsia.
2. To study the quality of life of patients with dyspepsia and compare it with the control population.

7. MATERIAL AND METHODS

This is a prospective observational study based upon Questionnaire to know the clinical profile and various risk factors of dyspepsia. Assessment of health related quality of life of patient with dyspepsia with be made by the use of english and hindi version of short form nepean dyspepsia index(SF-NDI).

7.1 SOURCE OF DATA

The study will be done on patients diagnosed with dyspepsia and controls (healthy relatives- age & gender matched) presented in Medicine and Allied specialties at Dayanand Medical College and Hospital, Ludhiana within a period from September 2022 to march 2022.Sample size will be 100 patients and 100 controls.

7.2 Methods of Collection of Data

Cases will be selected on the basis of inclusion and exclusion criteria as follows –

Inclusion Criteria

1)Patient diagnosed with dyspepsia as per clinical features

2)Patient age > 18 years and <75 years

Exclusion Criteria

1) Patients not satisfying inclusion criteria

2) Patients not willing to take part in the study

3) Patients with language barrier

STUDY DURATION

From 15th September 2022 to March 2024

OUTCOME: Assessment of quality of life of patients as compare to healthy relatives**.** Clinical profile parameters and risk factors associated with dyspepsia.

STATISTICAL ANALYSIS

Data were described in terms of range; mean ±standard deviation (± SD), frequencies (number of cases) and relative frequencies (percentages) as appropriate. To determine whether the data is normally distributed, a Kolmogorov-Smirnov test was used. Comparison of quantitative variables was done using Student t-test and man whitney U test for independent samples for parametric and non-parametric data respectively. For comparing categorical data, Chi square ($\chi 2$) test was performed and fisher exact test was used when the expected frequency is less than 5.A probability value (p value) less than 0.05 was considered statistically significant. All statistical calculations were done using (Statistical Package for the Social Science) SPSS 21version (SPSS Inc., Chicago, IL, USA) statistical program for Microsoft Windows.

7.3 DOES THE STUDY REQUIRE ANY INVESTIGATIONS OR INTERVENTIONS TO BE CONDUCTED ON PATIENTS OR OTHER HUMANS OR ANIMALS? IF SO, PLEASE DESCRIBE BRIEFLY.

No

7.4 HAS ETHICAL CLEARANCE BEEN OBTAINED FROM YOUR INSTITUTION IN CASE OF 7.3?

Yes, Attached herewith.

8. LIST OF REFERENCES

1. Kumar A, Pate J, Sawant P. Epidemiology of functional dyspepsia. J Assoc Physicians India. 2012;60:9-12.
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PROFORMA

Subject ID: _____	**MRD**: _____	**Date**: _____
Name:	**Age/Gender:**	**Ethnicity:**
Weight:	**Height:**	**BMI:**
Address:		**Urban/Semi-urban/Rural**
Phone No.:	**Comorbidities:** DM/HT/CKD/CAD/Thyroid/Other	
H/o any substance abuse	**Alc/Smoking/Other (specify)**	

	Qualification	**Occupation**	**Monthly income**	**No. of family members**
Subject				
Head of family				

Activity: ☐ Light worker ☐ Moderate worker ☐ Heavy worker

Diet Pattern: ☐ Veg ☐ Non-Veg ☐ Ovo-Veg

No. of meals/day: _____ **Speed**: ☐ Slow ☐ Moderate ☐ Fast

Erratic eating: ☐ Short gap ☐ Normal gap ☐ Long gap

Do you think that food affects your GI symptoms? **Y/N**

If yes, name the food _____

Self-reported **gluten** intolerance —

Self-reported **milk** intolerance —

Alarm Symptoms: Age > 60 years/Anemia /GI bleed /Progressive Dysphagia/Persistent Vomting/Unintentional weight loss/Family history of Gastric Cancer/Palpable lump/History of Nsaid

Signature of Candidate **Signature of Supervisor**

DATE			**Medication intake**		
Hb					
MCV					
TLC					
DLC (P/L/M/E)					
Platelets					
ESR					
RBS					
Urea/Creatinine					
Na/ K/ Cl					
Bilirubin (T/D)					
SGOT/SGPT					
ALP					
Protein					
Albumin					
Calcium					
Chol/TG/LDL					
Anti-TTG (IgA)		HBsAg			
		Anti HCV			
		Anti HIV			
Endoscopy					
Ultrasound Abdomen					
Covid status Y/N					
Vaccination 0/1/2/3					

Signature of Candidate **Signature of Supervisor**

INFORMED PATIENT CONSENT

Date: _____

I…….D/o, W/o, S/o……..…… am willing to participate in the study **"CLINICAL PROFILE,RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA"** The procedure with its complications has been explained to me in local vernacular language. I have fully understood that no special tests and extra expenditure in any form, merely for the purpose of thesis is being carried out. I am free to opt out the study any time without assigning any reason.

……. ……
Signature of the Witness Signature of the patient

Name:

Signature of Candidate **Signature of Supervisor**

मरीज अनुमति फार्म

तिथि _____

मैं _____ पत्नी/पुत्र/पुत्री _____

निवासी _____

इस शोधकार्य **"CLINICAL PROFILE,RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA"** में भाग लेने के लिए सहमत हूँ। मैं इस शोधकार्य में भाग लेने के लिए अपनी स्वेच्छा से तैयार हूँ। मैं पुष्टि करता/करती हूँ की यह स्वीकृति देने के लिए मुझे कोई आर्थिक प्रलोभन नहीं दिया गया और न ही दबाव डाला गया है। मुझे इस शोधकार्य का उद्देश्य स्पष्ट कर दिया गया है और मुझे यह विश्वास है की यह विज्ञान और मानवता के लाभ के लिए है। मुझे इस शोधकार्य में होने वाले जोखिम के बारे में समझा दिया गया है और मेरी समझ में यह जोखिम बहुत मामुली है।

मैं इस शोधकार्य में भाग लेने के सम्बन्ध में किसी भी समय अपनी अस्वीकृति व्यक्त कर सकता/सकती हूँ और मेरे अस्वीकृति व्यक्त करने का मेरे इलाज पर कोई प्रभाव नहीं पड़ेगा।

_____	_____
गवाह के हस्ताक्षर	रोगी के हस्ताक्षर/अंगूठे का निशान
नाम:	नाम:

_____

अन्वेषक के हस्ताक्षर

_____

विद्यार्थी के हस्ताक्षर

ਮਰੀਜ਼ ਰਜ਼ਾਮੰਦੀ ਫਾਰਮ

ਮਿਤੀ_____

ਮੈ_____ਪਤਨੀ/ਪੁੱਤਰ/ਪੁੱਤਰੀ_____

ਵਾਸੀ _____

“CLINICAL PROFILE,RISK FACTORS AND QUALITY OF LIFE OF PATIENTS WITH DYSPEPSIA” ਤੇ ਚਲ ਰਹੀ ਖੋਜ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਰਜ਼ਾਮੰਦ ਹਾਂ। ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਮੈ ਆਪਣੀ ਮਰਜ਼ੀ ਨਾਲ ਤਿਆਰ ਹਾਂ। ਮੈ ਇਹ ਦਸਣਾ ਚਾਹੁੰਦਾ ਹਾਂ/ ਚਾਹੁੰਦੀ ਹਾਂ ਕੇ ਇਹ ਰਜ਼ਾਮੰਦੀ ਦੇਣ ਵਾਸਤੇ ਮੈਨੂ ਕਿਸੇ ਵੀ ਤਰਾਂ ਦਾ ਲੋਭ-ਲਾਲਚ ਨਹੀ ਦਿੱਤਾ ਗਿਆ ਅਤੇ ਨਾ ਹੀ ਕੋਈ ਦਬਾ ਪਾਇਆ ਗਿਆ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਦਾ ਮਨੋਰਥ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਭਰੋਸਾ ਦਵਾਇਆ ਗਿਆ ਹੈ ਕੇ ਇਹ ਖੋਜ ਵਿਗਿਆਨ ਅਤੇ ਮਾਨਵਤਾ ਦੀ ਭਲਾਈ ਲਈ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਵਿਚ ਹੋਣ ਵਾਲੇ ਖਤਰੇ ਬਾਰੇ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਯਕੀਨ ਹੈ ਕੇ ਇਹ ਖਤਰਾ ਬਹੁਤ ਮਾਮੂਲੀ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਦਾ ਢੰਗ – ਤਰੀਕਾ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ।

ਮੈ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਬਾਰੇ ਆਪਣੀ ਰਜ਼ਾਮੰਦੀ ਕਿਸੇ ਵੀ ਸਮੇ ਵਾਪਸ ਲੈ ਸਕਦਾ ਹਾਂ/ ਸਕਦੀ ਹਾਂ ਅਤੇ ਮੇਰੀ ਰਜ਼ਾਮੰਦੀ ਵਾਪਸ ਲੈਣ ਦਾ ਮੇਰੇ ਇਲਾਜ ਤੇ ਕੋਈ ਅਸਰ ਨਹੀ ਹੋਵੇਗਾ।

_____ _____

ਗਵਾਹ ਦੇ ਹਸਤਾਖਰ ਮਰੀਜ਼ ਦੇ ਹਸਤਾਖਰ

ਮਿਤੀ_____ ਮਿਤੀ_____

ਪਤਾ _____ ਪਤਾ _____

_____

ਨਿਰੀਖਕ ਦੇ ਹਸਤਾਖਰ

_____

ਸਿਖਿਆਰਥੀ ਦੇ ਹਸਤਾਖਰ